CanAg ProGRP EIA

REF 220-10

IVD

CE

Instructions for use. 2022-06

Read highlighted changes

EN	**EXPLANATION OF SYMBOLS**
BG	**ОБЯСНЕНИЕ НА СИМВОЛИТЕ**
CS	**VÝZNAM SYMBOLŮ**
DA	**SYMBOLFORKLARING**
DE	**ERKLÄRUNG DER SYMBOLE**
EL	ΕΠΕΞΗΓΗΣΗ ΤΩΝ ΣΥΜΒΟΛΩΝ
ES	**SIGNIFICADO DE LOS SÍMBOLOS**
ET	**SÜMBOLITE SELGITUS**
FR	**EXPLICATION DES SYMBOLES**
HR	**OBJAŠNJENJE SIMBOLA**
HU	**JELMAGYARÁZAT**
IT	**SPIEGAZIONE DEI SIMBOLI**
LT	SIMBOLIŲ PAAIŠKINIMAI
LV	**SIMBOLU SKAIDROJUMS**
NL	**VERKLARING DER SYMBOLEN**
NO	**SYMBOLFORKLARING**
PL	OBJAŚNIENIE SYMBOLI
PT	**EXPLICAÇÃO DOS SÍMBOLOS**
RO	SEMNIFICAŢIA SIMBOLURILOR
RU	ОБОНАЧЕНИЯ
SV	**SYMBOLFÖRKLARING**
SK	**VÝZNAM SYMBOLOV**
SL	**RAZLAGA SIMBOLOV**
SR	**OBJAŠNJENJE SIMBOLA**
TR	SEMBOLLERİN AÇIKLAMALARI

Use By/Годно до/Použitelné do/Holdbar til/Verwendbar bis/Ημερομηνία λήξης/Fecha de caducidad/Kõlblik kuni/Utiliser jusque/Rok valjanosti/Felhasználható/Utilizare entro/Sunaudoti iki/Izlietot līdz/Houdbaar tot/Brukes innen/Użyć przed/Prazo de validade/Expiră la/Использовать до/Använd före/Použite´né do/ Uporabno do/Upotrebljivo do/Son Kullanma Tarihi

LOT

Batch code/Номер на партида/Číslo šarže/Lotnummer/Chargenbezeichnung/Αριθμός Παρτίδας/Código de lote/Partii kood/Code du lot/Kod serije/Sarzsszám/Codice del lotto/Partijos kodas/Partijas kods/Lot nummer/Partikode/Kod partii/Código do lote/Număr de lot/Номер лота/Lotnummer/Číslo šarže/Številka serije/Kod partije/Parti Kodu

Date of manufacture/Дата на производство/Datum výroby/ Produktionsdato/Herstellungsdatum/ Ημερομηνία παραγωγής/Fecha de fabricación/Valmistamise kuupäev/ Date de fabrication/Datum proizvodnje/ Gyártási idő/Data di produzione/ Pagaminimo data/Ražošanas datums/ Productiedatum/Fremstillingsdato/ Data produkcji/Data de fabrico/Data fabricaţiei/Дата производства/ Tillverkningsdatum/Dátum výroby/Datum izdelave/Datum proizvodnje/Üretim tarihi

Temperature limitation/ Температурни граници/ Teplotní omezení/ Temperaturbegrænsning/ Temperaturbegrenzung/ Περιορισμοί θερμοκρασίας/ Límites de temperatura/ Temperatuuri piirang/ Limite de température/ Temperaturno ograničenje/ Hőmérsékletre vonatkozó korlátozás/ Limiti di temperatura/ Temperatūriniai apribojimai/ Temperatūras ierobežojums/ Temperatuurbeperking/ Temperaturbegrensninger/ Temperatury graniczne/ Limite de temperatura/ Limite de temperatură/ Температурный режим/ Temperaturbegränsning/ Teplotné obmedzenie Omejitev temperature/ Temperaturno ograničenje/ Sıcaklık sınırlaması/

IVD

In Vitro Diagnostic Medical Device/ Медицински уред за диагностика ин витро/Diagnostický zdravotnický prostředek in vitro/Medicinsk udstyr til in vitro-diagnostik/In-vitro-Diagnostikum/ Ιατροτεχνολογικό προϊόν για διάγνωση In Vitro/Dispositivo médico para diagnóstico in vitro/In vitro diagnostiline meditsiiniseade/Dispositif médical de diagnostic in vitro/Diagnostički medicinski uređaj In Vitro/In vitro orvosdiagnosztikai eszköz/Dispositivo medico per test diagnostici in vitro/In Vitro Diagnostinė Medicinos Priemonė/Medicīniska ierīce in vitro diagnostikai/In vitro-diagnostisch medisch instrument/In vitro diagnostisk medisinsk utstyr/Wyrób medyczny do diagnostyki in vitro/Dispositivo Médico de Diagnóstico In Vitro/Dispozitiv medical pentru diagnostic in vitro/Только для диагностики In Vitro/Endast för in vitro-diagnostik/ Zdravotnícka pomôcka na diagnostiku in vitro/In vitro diagnostični pripomoček/Diagnostički medicinski uređaj In Vitro/<96> testleri için yeterlilik içerir

Contains sufficient for <96> tests/Съдържа достатъчно количество за тестове <96>/Lze použít pro <96> testů/Indeholder tilstrækkeligt/Inhalt ausreichend für <96> Prüfungen/Περιεχόμενο επαρκές για «96» εξετάσεις/Contenido suficiente para <96> ensayos/Kogusest piisab <96> testi läbiviimiseks/Contenu suffisant pour “96” tests/Sadrži dovoljno za <96> testova/A doboz tartalma <96> vizsgálat elvégzéséhez elegendő/Contenuto sufficiente per “96” saggi/Turinys skirtas atlikti <96> tyrimus/ Saturs pietiekams <96> testiem/Inhoud voldoende voor “96” testen/til “96” test/ Tilstrekkelig innhold for <96> prøver/ Wystarczy na wykonanie <96> testów/ Conteúdo suficiente para “96” ensaios/ Conţinut suficient pentru 96 de teste/ Съдържит достаточные количества для «96» определений/Innehåller tillräckligt till “96” antal tester/Obsah postačuje na tento počet testov: <96>/Vsebina zadostuje za <96> testov/Sadržina dovoljna za <96> testova/<96> testleri için yeterlilik içerir

REF

Catalogue number/Каталожен номер/ Katalogové číslo/Katalognummer/ Bestellnummer/Αριθμός καταλόγου/ Número de catálogo/Kataloogi number/ Numéro de catalogue/Kataloški broj/ Katalógusszám/Numero di catalogo/ Katalogo numeris/Numurs katalogā/ Katalogusnummer/Katalognummer/ Numer katalogowy/Número do catálogo/ Număr de catalog/Номер по каталогу/ Produktnummer/Katalógové číslo/ Kataloška številka/Kataloški broj/ Katalog numarası

Consult Instructions for Use/ Прочетете инструкцията за употреба/Konzultujte s návodem k použití/Se brugsanvisning/Siehe Gebrauchsanweisung/Συμβουλευτείτε τις Οδηγίες σχετικά με τη χρήση/ Consulte las instrucciones de uso/ Vt kasutusjuhendit/Consulter le mode d'emploi/Pročitajte upute za uporabu/ Olvassa el a használati utasítást/ Consultare le istruzioni per l'uso/Dėl naudojimo žiūrėkite instrukcijas/Izlasiet lietošanas instrukciju/Raadpleeg de instructies voor gebruik/Les instruksene før bruk/Sprawdzić w instrukcji użycia/ Consulte as Instruções de Utilização/ Consultaţi instrucţiunile de utilizare/ Обратитесь к инструкции по применению/Se bruksanvisning/ Prečítajte si návod na používanie/ Pročitajte uputstvo za upotrebu/ Kullanım Talimatlarına Bakınız

CONT

Contents of kit/Съдържание на набора/ Obsah soupravy/Kittets indhold/Inhalt des Kits/Περιεχόμενα του κιτ/Contenido del kit/Komplekt sisaldab/Contenu du kit/Sadržaj opreme/A készlet tartalma/ Contenuto del kit/Rinkinio turinys/ Komplekta saturs/Inhoud van de set/ Settets innhold/Zawartość zestawu/ Conteúdo do kit/Conţinutul setului/ Компоненты набора/Kit innehåll/ Obsah súpravy/Vsebina kompleta/Sadržaj opreme/Kitin içindekiler

Biological risks/Биологическа опасност/Biologická rizika/Biologisk fare/Biologische Gefahren/Βιολογικοί κίνδυνοι/Riesgos biológicos/ Bioloogilised ohud/Risques biologiques/ Biološkli rizici/Biológiai kockázatok/Rischi biologici/Biologinis pavojus/Bioloģiskais risks/Biologische risico's/Biologiske risikoer/Zagrożenie biologiczne/Riscos biológicos/ Biologisk risk/Pericole biologice/Биологическая опасность/ Biologicky rizikové/Biologické riziká/ Biološkli rizici/Biyolojik riskler

ORIG | HUM

Human/С човешки произход/Lidské/ Humant/Human/δείγματα αναφοράς/ Humano/Inimpäritolu/Humaine/Ljudskog porjekla/Humán/Origine Umana/ Žmogaus kilmės/Cilvēku izcelsmes/ Human/Menneske/Ludzka/Humano/ Origine umană/Человеческого происхождения/Human/Ľudské/ Humanega izvora/Ljudskog porekla/İnsan

ORIG | MOU

From mouse/С миши произход/Myší/ Fra mus/Maus/απο ποντίκι/de ratón/ Hiirtelt/De souris/Mišijeg porjekla/ Egérből/Murino/Pelės kilmės/No peles/ Van muizen/Fra mus/Mysia/Do rato/De la şoareci/Мышиного происхождения/ Från mus/Mysie/Mišjega izvora/Mišijeg porekla/Fareden

ORIG | BOV

Bovine/С говежди произход/ Hovězí/Bovin/Rind/από βοοειδή/ Bovino/Veistelt/Bovine/Rogate stoke/ Szarvasmarha/Bovino/Jaučio/No liellopa/Bovien/Bovin/Wołowy/Bovino/ Origine bovină/крупного рогатого скота/Från ko/Hovädzie/Govejega izvora/Rogate krupne stoke/Bovin

Reconstitute with/Разтваряне с/ Rozřeďte pomocí/Rekonstitueres med/ Rekonstituieren mit/Ανασύσταση με/ Reconstituir con/Lahjendamine/ Reconstituer avec/Rekonstituirajte s/ Feloldáshoz/Ricostituire con/Atkurti, ištirpdant su/Atšķaidīt ar/Reconstitutie met/Rekonstitueres med/Odtworzyć za pomocą/Reconstituie com/A se reconstitui cu/Растворить в/ Rekonstituera med/Rozrieďte pomocou/ Rekonstituirajte z/s/Ponovno formiranje sa/Yeniden oluşturulur

Manufacturer/Производител/Výrobce/ Producent/Hersteller/Κατασκευαστής/ Fabricante/Tootja/Fabricant/Proizvođač/ Gyártó/Fabbricante/Gamintojas/ Ražotājs/Fabrikant/Produsent/ Producent/Fabricante/Producător/ Производитель/Tillverkare/ Výrobca/ Izdelovalec/Proizvođač/Üretici

INSTRUCTIONS FOR USE

EN

INSTRUCTIONS FOR USE

Please visit our website **www.fdi.com/ifu** to obtain the Instructions For Use (IFU) in additional languages.

To ensure that you download the correct IFU for your kit lot, please select the revision corresponding to the issue date printed on the front page of the IFU provided with this kit.

Please follow the IFU carefully. Instructions for safe handling are found in the WARNINGS AND PRECAUTIONS section. Material Safety Data Sheets (MSDS) are available on our website **www.fdi.com**. If you do not have access to the internet, please contact you local distributor, or Fujirebio Diagnostics AB for assistance.

CS

NÁVOD K POUŽITÍ

Návod k použití v dalších jazycích najdete na našich webových stránkách **www.fdi.com/ifu.**

Abyste se ujistili, že jste si stáhli správný návod k použití pro vaši šarži sady, vyberte revizi odpovídající datu vydání vytištěnému na přední straně návodu k použití dodanému s touto sadou.

Návod k použití pøesnì dodržujte. Pokyny pro bezpeènou manipulaci najdete v èásti VAROVÁNÍ A UPOZORNÌNÍ. Tabulky údajù o bezpeènosti materiálu (MSDS) najdete na stránkách **www.fdi.com**. Neláte-li pøístup k Internetu, požádejte o pomoc místního distributora nebo spoleènost Fujirebio Diagnostics AB.

DA

BRUGSANVISNINGER

Gå ind på vores hjemmeside **www.fdi.com/ifu** for at hente brugsanvisninger på andre sprog.

For at sikre at du henter den rette brugsanvisning til det pågældende kitlot, skal du vælge det revisionsnummer, der svarer til den udgivelsesdato, der er trykt på forsiden af den brugsanvisning, der følger med kittet.

Følg brugsanvisningen omhyggeligt. Vejledning i sikker håndtering findes i afsnittet ADVARSLER OG FORSIGTIGHEDSREGLER. Sikkerhedsdataark (MSDS) kan hentes på vores hjemmeside **www.fdi.com/ifu**. Hvis du ikke har adgang til internettet, kan du kontakte den lokale distributør eller Fujirebio Diagnostics AB for assistance.

DE

GEBRAUCHSANWEISUNG

Auf unserer Website **www.fdi.com/ifu** finden Sie die Gebrauchsanweisung in weiteren Sprachen.

Um sicherzustellen, dass Sie die richtige Gebrauchsanweisung für Ihre Kit-Charge herunterladen, wählen Sie bitte die Version, die mit dem Veröffentlichungsdatum auf der Titelseite der mit diesem Kit mitgelieferten Gebrauchsanweisung übereinstimmt.

Halten Sie sich bitte genau an die Gebrauchsanweisung. Anweisungen für den sicheren Umgang finden Sie im Abschnitt „SICHERHEITSHINWEISE UND VORSICHTSMASSNAHMEN“. Die Materialsicherheitsdatenblätter (MSDS) finden Sie auf unserer Website **www.fdi.com**. Sollten Sie keinen Zugang zum Internet haben, so wenden Sie sich bitte an Ihren örtlichen Vertriebshändler oder an Fujirebio Diagnostics AB.

EL

ΟΔΗΓΙΕΣ ΧΡΗΣΗΣ

Για να λάβετε τις Οδηγίες χρήσης και σε άλλες γλώσσες, επισκεφθείτε την τοποθεσία μας στο web **www.fdi.com/ifu**.

Για να διασφαλίσετε ότι κάνετε λήψη των σωστών Οδηγιών χρήσης για την παρτίδα του κιτ σας, επιλέξτε την αναθεώρηση που αντιστοιχεί στην ημερομηνία έκδοσης που αναγράφεται στην μπροστινή σελίδα των Οδηγιών χρήσης αυτού του κιτ.

Ακολουθήστε τις Οδηγίες χρήσης με προσοχή. Μπορείτε να βρείτε οδηγίες για ασφαλή χειρισμό στην ενότητα ΠΡΟΕΙΔΟΠΟΙΗΣΕΙΣ ΚΑΙ ΠΡΟΦΥΛΑΞΕΙΣ. Στην τοποθεσία μας στο web **www.fdi.com** διατίθενται Φύλλα δεδομένων ασφαλείας υλικών (MSDS). Εάν δεν έχετε πρόσβαση στο internet, επικοινωνήστε με το διανομέα της περιοχής σας ή με την Fujirebio Diagnostics AB για βοήθεια.

ES

INSTRUCCIONES DE USO

Visite nuestro sitio web **www.fdi.com/ifu** para obtener instrucciones de uso (IFU) en otros idiomas.

Para asegurarse de que descarga las instrucciones de uso adecuadas a su lote de kits, seleccione el número de revisión que corresponda a la fecha de emisión impresa en la primera página de las instrucciones de uso suministradas con este kit.

Por favor, siga las instrucciones atentamente. Las instrucciones relativas a la seguridad en la manipulación figuran en el apartado ADVERTENCIAS Y PRECAUCIONES. Las fichas de seguridad de los materiales (MSDS) también están disponibles en nuestro sitio web: **www.fdi.com**. Si no tiene acceso a Internet, póngase en contacto con su distribuidor local o con Fujirebio Diagnostics AB para obtener ayuda.

ET

KASUTUSJUHEND

Erinevates keeltes kasutusjuhend on kättesaadav meie veebilehel **www.fdi.com/ifu**.

Komplekti partiile vastava kasutusjuhendi allalaadimise tagamiseks valige versioon, mis vastab komplektile lisatud kasutusjuhendi esilehel toodud väljaandmise kuupäevale.

Palun järgige kasutusjuhendit hoolikalt. Ohutusjuhised on toodud HOIATUSTE JA ETTEVAATUSABINÕUDE osas. Materjali ohutuskaardid on kättesaadavad meie veebilehel **www.fdi.com**. Kui Teil ei ole võimalik Internetti kasutada, pöörduge abi saamiseks kohaliku esindaja või Fujirebio Diagnostics AB poole.

FR

MODE D'EMPLOI

Visitez notre site Web, **www.fdi.com/ifu**, pour obtenir le mode d'emploi dans d'autres langues.

Pour être sûr que vous téléchargez le mode d'emploi correspondant à votre lot de kit, sélectionnez la version correspondant à la date de publication imprimée sur la première page du mode d'emploi joint à ce kit.

Veuillez suivre soigneusement les indications du mode d'emploi. Les instructions de manipulation sans risque se trouvent dans la section AVERTISSEMENTS ET PRÉCAUTIONS. Des fiches de données de sécurité (MSDS) sont disponibles sur notre site Web, **www.fdi.com**. Si vous n'avez pas accès à Internet, veuillez contacter votre distributeur local ou Fujirebio Diagnostics AB pour obtenir de l'aide.

HR

UPUTA ZA UPORABU

Molimo posjetite naše stranice **www.fdi.com/ifu** radi preuzimanja Upute za uporabu (IFU) na ostalim jezicima.

Da biste osigurali preuzimanje ispravnih IFU za vaš komplet, molimo odaberite reviziju koja odgovara datumu izdavanja otisnutim na prednjoj stranici IFU koje ste dobili s kompletom.

Molimo slijedite IFU pažljivo. Uputstva za sigurno rukovanje nalaze se u odjeljku UPOZORENJA I MJERE OPREZA. Sigurnosno-tehnički listovi (MSDS) su dostupni na našim stranicama **www.fdi.com**. Ako nemate pristup ineternetu, molimo da se obratite lokalnom distributeru ili Fujirebio Diagnostics AB za pomoć.

HU

HASZNÁLATI UTASÍTÁS

További nyelveken készült Használati utasítások találhat a **www.fdi.com/ifu** honlapon.

Annak biztosítása érdekében, hogy az Ön kit tételének megfelelő Használati utasítást töltse le, válassza a kithez mellékelt Használati utasítás első oldalán lévő kibocsátási dátumnak megfelelő módosítást.

Kérjük, tartsa be a Használati utasítás előírásait. A biztonságos kezelésre vonatkozó utasítások a FIGYELMEZTETÉSEK ÉS ÓVINTÉZKEDÉSEK című fejezetben találhatók. A Biztonsági adatlapok (MSDS) honlapunkon **(www.fdi.com)** elérhetőek. Amennyiben Ön nem rendelkezik internet hozzáféréssel, forduljon segítségért helyi értékesítőjéhez vagy a Fujirebio Diagnostics AB-hez.

IT

ISTRUZIONI PER L'USO

Istruzioni per l'uso in altre lingue sono disponibili sul nostro sito web **www.fdi.com/ifu.**

Per scaricare le Istruzioni per l'uso corrispondenti al lotto del proprio kit, selezionare la revisione corrispondente alla data di emissione stampata sulla prima pagina delle Istruzioni per l'uso fornite insieme al kit.

Seguire attentamente le Istruzioni per l'uso. Le istruzioni per una gestione sicura sono contenute nella sezione AVVERTENZE E PRECAUZIONI. Sul nostro sito web **www.fdi.com** sono disponibili le schede tecniche relative alla sicurezza dei materiali. Qualora fosse impossibile accedere a Internet, contattare il proprio distributore locale oppure rivolgersi a Fujirebio Diagnostics AB.

LT

NAUDOJIMO INSTRUKCIJOS

Kad gautumėte naudojimo instrukcijas kitomis kalbomis, apsilankykite mūsų tinklalapyje: **www.fdi.com/ifu.**

Kad atsisiųstumėte instrukcijas, kurios tikrai tinka Jūsų komplektui, pasirinkite peržiūros datą, kuri atitinka pagaminimo datą, atspausdintą su šiuo komplektu pateiktų instrukcijų viršelyje.

Atidžiai laikykitės instrukcijų. Saugaus naudojimo instrukcijos yra skyriuje PERSPĖJIMAI IR ATSARGUMO PRIEMONĖS. Medžiagų saugos duomenų lapus (MSDS) rasite mūsų tinklalapyje **www.fdi.com**. Jeigu neprieinate prie interneto, kreipkitės pagalvos į savo vietinį distribiutorių arba į„Fujirebio Diagnostics AB“.

LV

LIETOŠANAS INSTRUKCIJA

Lai iegūtu lietošanas instrukciju (LI) citās valodās, lūdzu, apmeklējiet mūsu vietni www.**fdi.com/ifu**.

Lai lejupielādētu pareizo LI savam komplektam, lūdzu, izvēlieties versiju, kas atbilst šim komplektam pievienotās LI pirmajā lappusē iespiestajam izdošanas datumam.

Lūdzu, rūpīgi iepazīstieties ar LI un ievērojiet to. Norādījumi drošai lietošanai sniegti sadaļā BRĪDINĀJUMI UN PIESARDZĪBAS PASĀKUMI. Materiālu drošības datu lapas (MDDL) ir pieejamas mūsu vietnē **www.fdi.com**. Ja jums nav pieejams internets, lūdzu, sazinieties ar vietējo izplatītāju vai Fujirebio Diagnostics AB, lai iegūtu palīdzību.

NL

INSTRUCTIES VOOR GEBRUIK

Ga naar onze website **www.fdi.com/ifu** voor de Instructies voor gebruik in andere talen.

Om ervoor te zorgen dat u de juiste Instructie voor gebruik downloadt voor uw setpartij, selecteert u de revisie die overeenkomt met de uitgavedatum die afgedrukt staat op de voorpagina van de Instructies voor gebruik die bij deze kit bijgeleverd zijn.

Volg de Instructie voor gebruik zorgvuldig op. U vindt de instructies voor een veilig hanteren in het gedeelte WAARSCHUWINGEN EN VOORZORGSMAATREGELEN. Op onze website **www.fdi.com** zijn ook Veiligheidsinformatiebladen (MSDS) beschikbaar. Als u geen toegang hebt tot het internet, neemt u dan contact op met uw plaatselijke distributeur of met Fujirebio Diagnostics AB voor assistentie.

NO

BRUKSINSTRUKSER

Bruksinstrukser (IFU) på andre språk kan lastes ned fra vår hjemmeside **www.fdi.com/ifu**.

For å sikre at du laster ned den riktige IFU-en for ditt settparti, vennligst velg oppdateringen som svarer til utstedelsesdatoen på forsiden av IFU-en levert med settet ditt.

Vennligst følg IFU-instruksene nøye. Instrukser for sikker håndtering fins i avsnittet ADVARSLER OG FORHOLDSREGLER. Materialesikkerhetsdatasider (MSDS) kan lastes ned fra vår hjemmeside **www.fdi.com**. Dersom du ikke har adgang til internettet, vennligst kontakt din lokalforhandler eller Fujirebio Diagnostics AB for å få hjelp.

PL

INSTRUKCJA UŻYCIA

Instrukcje użycia (IFU) w innych językach znaleźć można na naszej stronie internetowej **www.fdi.com/ifu**.

Aby mieć pewność, że pobierasz instrukcję użycia właściwą dla partii zestawu, wybierz wersję odpowiadającą dacie wydania nadrukowanej na okładce IFU dostarczonej z zestawem.

Należy ściśle przestrzegać zaleceń zawartych w instrukcji użycia. Instrukcje dotyczące bezpiecznej pracy znaleźć można w części OSTRZEŻENIA I ŚRODKI OSTROŻNOŚCI. Karty charakterystyki substancji (MSDS) dostępne są na naszej stronie internetowej **www.fdi.com**. W przypadku braku dostępu do Internetu, pomoc można uzyskać u lokalnego dystrybutora lub w firmie Fujirebio Diagnostics AB.

PT

INSTRUÇÕES DE UTILIZAÇÃO

Visite o nosso sítio da Internet **www.fdi.com/ifu** para obter Instruções de Utilização (IDU) em idiomas adicionais.

Para assegurar que descarrega as IDU correctas para o lote do seu kit, seleccione a revisão correspondente à data de emissão impressa na capa das IDU fornecida com este kit.

Siga as IDU cuidadosamente. É possível encontrar instruções para um manuseamento seguro na secção ADVERTÊNCIAS E PRECAUÇÕES. As Fichas de Dados de Segurança do Material (FDSM) estão disponíveis em **www.fdi.com**. Se não tiver acesso à Internet, contacte o seu distribuidor local ou a Fujirebio Diagnostics AB para obter ajuda.

RO

INSTRUCŢIUNI DE UTILIZARE

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Urmaţi cu atenţie instrucţiunile de utilizare. Instrucţiunile pentru o manevrare în siguranţă se regăsesc în secţiunea AVERTISMENTE ŞI PRECAUŢII. Fişele de date despre siguranţa materialelor (Material Safety Data Sheets - MSDS) sunt disponibile pe site-ul nostru Web **www.fdi.com**. Dacă nu aveţi acces la Internet, contactaţi pentru asistenţă distribuitorul dvs. local sau Fujirebio Diagnostics AB.

SK

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Aby ste sa uistili, že ste prevzali správny návod na použitie pre danú šaržu súpravy, vyberte revíziu zodpovedajúcu dátumu vydania vytlačenému na prednej strane návodu na použitie dodanému s touto súpravou.

Návod na použitie presne dodržujte. Pokyny na bezpečnú manipuláciu nájdete v časti VÝSTRAHY A UPOZORNENIA. Tabuľky údajov o bezpečnosti materiálu (MSDS) nájdete na stránkach **www.fdi.com**. Ak nemáte prístup na internet, požiadajte o pomoc miestneho distribútora alebo spoločnosť Fujirebio Diagnostics AB.

SL

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Če želite zagotoviti, da ste prenesli ustrezna navodila za uporabo za vašo serijo kompleta, izberite različico, ki ustreza datumu izdaje, natisnjenemu na sprednji strani navodil za uporabo, priloženih temu kompletu.

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SR

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Molimo Vas da posetite naš sajt **www.fdi.com/ifu** kako biste dobili Uputstvo za upotrebu na ostalim jezicima.

Da biste bili sigurni da ste skinuli odgovarajuće Uputstvo za upotrebu za Vaš set proizvoda, molimo Vas da odaberete odeljak koji odgovara datumu odštampanom na prednjoj strani Uputstva za upotrebu koje ste dobili uz proizvod.

Molimo Vas da pažljivo sledite uputstva data u Uputstvu za upotrebu. Uputstva za bezbedno korišćenje su data u odeljku pod naslovom UPOZORENJE I OPREZ. Informacije vezane za bezbedno korišćenje materijala su dostupne na sajtu **www.fdi.com**. Ako nemate pristup Internetu, molimo Vas da stupite u kontakt sa lokalnim distributerom ili se telefonom obratite Fujirebio Diagnostics službi za davanje informacija.

SV

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Säkerställ att du laddar ner rätt bruksanvisning för din kit lot genom att välja samma revisionsdatum som anges på framsidan av den bruksanvisning som medföljer denna förpackning.

Vänligen följ noga anvisningarna i bruksanvisningen. Instruktioner för säker användning finns i stycket VARNINGAR OCH FÖRSIKTIGHETSÅTGÄRDER. Säkerhetsdatablad (MSDS) finns att ladda ner från vår hemsida, **www.fdi.com**. Om du inte har tillgång till internet, vänligen kontakta din lokala distributör eller Fujirebio Diagnostics AB för att få hjälp.

KULLANIM TALIMATLARI

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Kit partiniz için doğru KT'nı indirdiğinizden emin olmak için lütfen bu kitle birlikte verilen KT'ının ön sayfasında yazılı düzenlenme tarihiyle eşleşen gözden geçirmeyi seçin.

Lütfen KT'nı dikkatli bir şekilde izleyin. Güvenli kullanımla ilgili talimatlar UYARILAR VE ÖNLEMLER bölümünde bulunmaktadır. Malzeme Güvenliği Veri Sayfaları (MGVS) **www.fdi.com** adresindeki web sitemizde bulunmaktadır. Internet erişiminiz bulunmuyorsa, destek için lütfen yerel distribütörünüz veya Fujirebio Diagnostics AB ile temasa geçin.

EN

CanAg ProGRP EIA

Instructions for use

Enzyme immunometric assay kit
For 96 determinations

INTENDED USE

The CanAg ProGRP EIA kit is an immunoassay for the quantitative determination of ProGRP in serum. The CanAg ProGRP assay is to be used as an aid in the differential diagnosis and in monitoring disease progression during the course of disease and treatment in small cell lung cancer patients.

Testing for patient proGRP assay values should be used in conjunction with other clinical methods used in the management of patients with small cell lung cancer.

SUMMARY AND EXPLANATION OF THE ASSAY

GRP (Gastrin Releasing Peptide) is a hormone that is secreted from Small Cell Lung Cancer (SCLC) cells. Although detection of serum GRP has been expected to be useful for diagnosis of SCLC, determination of serum GRP has not been feasible owing to its instability in blood (1, 2). The precursor Pro Gastrin Releasing Peptide (ProGRP) however, is more stable and can be used as a serological marker for GRP (3). The CanAg ProGRP EIA kit measures ProGRP (31-98) a carboxy-terminal region common to human ProGRP splice variants.

ProGRP is expressed in neuroendocrine-derived tissues and tumors, including small cell lung cancer carcinoids, undifferentiated large cell carcinoma of the lung with neuroendocrine features, medullary thyroid carcinoma, and other neuroendocrine malignancies. Serum levels of ProGRP have been shown to be elevated in a high proportion of patients diagnosed with SCLC while normal levels are found in patients with benign disease (4-10).

Due to its high sensitivity and specificity for SCLC, ProGRP has shown clinical utility in the differential diagnosis of lung cancer. Additive information in the diagnosis of SCLC is provided by the combined measurement of ProGRP and NSE (8,10,11,14). ProGRP is also useful in monitoring the response to therapy and for the detection of recurrent disease (11-13).

Elevated levels of ProGRP may be detected in early stage small cell lung cancer (9). However, as the incidence of SCLC in the general population is low the ProGRP assay should not be used as a screening test.

PRINCIPLE OF THE TEST

The CanAg ProGRP EIA is a solid-phase, one-step, non-competitive immunoassay based on antibodies specific for different epitopes specifically expressed in ProGRP. Calibrators, controls or patient samples are incubated together with affinity purified biotinylated Anti-ProGRP polyclonal antibody and horseradish peroxidase (HRP) labelled Anti-ProGRP Monoclonal antibody E146 in Streptavidin coated microstrips. After washing, buffered Substrate/Chromogen reagent (hydrogen peroxide and 3, 3', 5, 5' tetra-methylbenzidine) is added to each well and the enzyme reaction is allowed to proceed. During the enzyme reaction a blue colour will develop if antigen is present. The intensity of the colour is proportional to the amount of ProGRP present in the samples. The colour intensity is determined in a microplate spectrophotometer at 450 nm after addition of Stop Solution. Calibration curves are constructed for each assay by plotting absorbance value versus the concentration for each calibrator. The ProGRP concentrations of patient samples are then read from the calibration curve.

REAGENTS

- Each CanAg ProGRP EIA kit contains reagents for 96 tests.
- The expiry date of the kit is stated on the label on the outside of the kit box.
- Do not use the kit beyond the expiry date.
- Do not mix reagents from different kit lots.
- Store the kit at 2–8° C.
- Opened reagents are stable according to the table below provided they are not contaminated, stored in resealed original containers and handled as prescribed. Return to 2–8° C immediately after use.

Component	Quantity	Storage and stability after first use
MICROPLA		
Microplate	1 Plate	2–8° C until expiry date stated on the plate

12 x 8 breakable wells coated with streptavidin. After opening, immediately return unused strips to the aluminum pouch, containing desiccant. Reseal carefully to keep dry.

ProGRP Calibrators A-F	6 vials, lyophilized	Stability after reconstitution 3 days at 2–8° C 3 months at -20° C or below
CAL ProGRP A	1 x 1 mL	
CAL ProGRP B	1 x 1 mL	
CAL ProGRP C	1 x 1 mL	
CAL ProGRP D	1 x 1 mL	
CAL ProGRP E	1 x 1 mL	
CAL ProGRP F	1 x 1 mL	

The lyophilised calibrators contain human cell line derived ProGRP in a protein matrix with an inert yellow dye and a non-azide preservative. To be reconstituted with 1 mL of distilled or deionised water before use. **NOTE:** The exact ProGRP concentration is lot specific and is indicated on the label of each vial.

Component	Quantity	Storage and stability after first use
ProGRP Controls	2 vials, lyophilized	Stability after reconstitution 3 days at 2–8° C 3 months at -20° C or below
CONTROL ProGRP 1	1 x 1 mL	
CONTROL ProGRP 2	1 x 1 mL	

The lyophilized controls contain human cell-line derived ProGRP in a protein matrix and a non-azide preservative. To be reconstituted with distilled or deionised water before use. **NOTE:** The expected ProGRP concentration range is lot specific and is indicated on the label of each vial.

BIOTIN Anti-ProGRP

Biotin Anti-ProGRP	1 x 15 mL	4 months at 2–8° C

Affinity purified Biotin Anti-ProGRP Polyclonal antibody from goat, approximately 4 µg/mL. Contains phosphate buffered saline (pH 7.2), bovine serum albumin, blocking agents, detergent, an inert blue dye, and a non-azide preservative. Ready for use.

CONJ Anti-ProGRP

Tracer, HRP Anti-ProGRP	1 x 0.75 mL	4 months at 2–8° C

Stock Solution of HRP Anti-ProGRP monoclonal antibody from mouse, approximately 21 µg/mL. Contains non-azide preservatives. To be mixed with Biotin Anti-ProGRP before use.

DIL SPE

Sample Diluent	1 x 8 mL	4 months at 2–8° C

Contains 0.15 M Sodium Chloride and a non-azide preservative in a non-protein matrix. Ready for use.

Component	Quantity	Storage and stability after first use
SUBS TMB		
TMB HRP-Substrate	1 x 12 mL	2–8° C until expiry date stated on the vial
Contains buffered hydrogen peroxide and 3, 3', 5, 5' tetra-methylbenzidine (TMB). Ready for use.		
STOP		
Stop Solution	1 x 15 mL	2–8° C until expiry date stated on the vial
Contains 0.12 M hydrochloric acid. Ready for use.		
WASHBUF 25X		
Wash Concentrate	1 x 50 mL	2–8° C until expiry date stated on the bottle
A Tris-HCl buffered salt solution with Tween 20. Contains Germall II as preservative. To be diluted with distilled or deionized water 25 times before use.		

Indications of instability

The TMB HRP-Substrate should be colorless or slightly bluish. A blue color indicates that the reagent has been contaminated and should be discarded.

WARNINGS AND PRECAUTIONS

For In Vitro Diagnostic Use:

- Follow the instructions in the package insert. Reliability of assay results cannot be guaranteed if there are any deviations from the instructions in this package insert.
- Handle all patient specimens as potentially infectious. It is recommended that human source reagent and human specimens be handled in accordance with the OSHA Standard on Bloodborne pathogens (15). Biosafety level 1 (16) or other appropriate biosafety practices should be used for material that contain or are suspected of containing infectious agents.

- Avoid contact with reagents containing hydrogen peroxide or hydrochloric acid. In case of contact with any of these reagents, wash thoroughly with water.
- Follow local guidelines for disposal of all waste material.

CLP (1272/2008) HAZARD CLASSIFICATION

Information about CLP (1272/2008) HAZARD CLASSIFICATION can be found at the end of this document.

SPECIMEN COLLECTION AND HANDLING

The CanAg ProGRP EIA is intended for use with serum. Collect blood by venipuncture and separate the serum according to common procedures. Plasma and other body fluids have not been validated for use with the CanAg ProGRP EIA. Serum collection tubes that contain a thrombin based clotting acceleration agent must not be used because this agent may cause degradation of ProGRP. Serum specimens should be processed immediately following adequate clotting, or stored at 2-8° C. Do not use serum specimens that have been exposed to room temperature (up to 25° C) for more than 3 hours, including clot time. Serum can be stored at 2–8° C for up to 24 hours, before being tested. Serum specimens must be tested immediately after removal from storage at 2-8° C. For longer periods store samples at -40° C or colder. Thaw frozen samples and mix thoroughly by vortexing or by inverting 10 times before analysis. For accurate results samples should be free of fibrin, red blood cells, or other particular matter. Serum specimens from patients receiving anticoagulant or thrombolytic therapy may contain fibrin due to incomplete clot formation.

PROCEDURE

Materials required but not supplied with the kit

1. **Microplate shaker**
   Shaking should be medium to vigorous, approximately 700-1100 oscillations/min.
2. **Microplate wash device**
   For best results we recommend an Automatic plate washer capable of performing 1 and 6 washing cycles, and with a minimal fill volume of **800 µL/well**/wash cycle using overflow wash mode. An 8-channel pipette with disposable plastic tips for delivery of 350 µL (i.e. completely filled wells) is recommended if an automatic microplate washer is not used.
3. **Microplate spectrophotometer**
   With a wavelength 450 nm and an absorbance range of 0 to 3.0.
4. **Precision pipettes**
   With disposable plastic tips for dispensing microliter volumes. An 8-channel pipette or dispenser pipette with disposable plastic tips for delivery of 100 µL is recommended but not required. Pipettes for dispensing milliliter volumes.

Protocol Sheet

ProGRP EIA REF 220-10

Prepare the components directly before use. Use wash and incubation conditions according to the Instructions.

Step		Vial/Plate	Procedure
1.	Prepare ProGRP Calibrators	CAL ProGRP A, B, C, D, E, F	Add 1.0 mL of distilled or deionised water to each vial. Allow to stand for at least 15 minutes. Mix thoroughly before use. NOTE: The exact concentration of each calibrator is stated on the label. Reconstituted stability: 3 days at 2-8°C. 3 months at -20° C or below.
	Prepare ProGRP Controls	CONTROL ProGRP 1, 2	
	Prepare Wash Solution	WASHBUF 25X	Dilute 50 mL of Wash Concentrate with 1200 mL of distilled or deionised water.
	Prepare Antibody Solution	CONJ Anti-ProGRP BIOTIN Anti-ProGRP	Mix 50 µL of Tracer, HRP Anti-ProGRP with 1mL of Biotin Anti-ProGRP per strip:

No. of Strips	Tracer, HRP Anti-ProGRP (µL)	Biotin Anti-ProGRP (mL)
1	50	1
2	100	2
3	150	3
4	200	4
5	250	5
6	300	6
7	350	7
8	400	8
9	450	9

		10	500	10
		11	550	11
		12	600	12
2.	Wash	MICROPLA	Wash each well once with Wash Solution. Use manual or automatic washer.
3.	Add calibrators, controls and samples	CAL ProGRP A, B, C, D, E, F CONTROL ProGRP 1, 2	50 µL in each well
4.	Add Antibody Solution	ANTIBODY SOLUTION	100 µL in each well
5.	Incubate	MICROPLA	2 hours (± 10 min) shaking at room temperature (20-30°C)
6.	Wash	MICROPLA	Wash each well six times with Wash Solution Use manual or automatic washer.
7.	Add TMB HRP-Substrate	SUBS TMB	100 µL in each well
8.	Incubate	MICROPLA	30 min (± 5 min) shaking at room temperature (20-30°C)
9.	Add Stop Solution	STOP	100 µL in each well
10.	Incubate	MICROPLA	1 min shaking at room temperature
11.	Read absorbance	MICROPLA	Read at 450 nm within 5 min

5. **Distilled or deionized water**
   For reconstitution of ProGRP Calibrators, ProGPR Controls and for preparation of diluted Wash Solution.

Procedural notes

1. A thorough understanding of this package insert is necessary to ensure proper use of the CanAg ProGRP EIA kit. The reagents supplied with the kit are intended for use as an integral unit. Do not mix reagents from kits having different lot numbers. Do not use the kit reagents after the expiry date printed on the outside of the kit box.
2. Reagents should be allowed to reach room temperature (20–30° C) prior to use. Frozen specimens must be thoroughly mixed after thawing. **Please refer to specimen collection and handling section above.**
3. Before starting to pipette calibrators and patient specimens it is advisable to mark the strips to be able to clearly identify the samples during and after the assay.
4. The requirement for efficient and thorough washing for separation of bound and unbound antigen and reagents from the solid-phase bound antibody-antigen complexes is one of the most important steps in an EIA. In order to ensure efficient washing make sure that all wells are completely filled to the top edge with wash solution during each wash cycle, that wash solution is dispensed at a good flow rate, that the aspiration of the wells between and after the wash cycles is complete and that the wells are empty. If there is liquid left, invert the plate and tap it carefully against absorbent paper.
   - Automatic strip washer: Follow the manufacturer's instructions for cleaning and maintenance diligently and wash the required number of wash cycles prior to and after each incubation step. *It's highly recommended to use overflow wash mode with a dispensing volume of 800 µL.*
     Note: A very rapid aspiration rate in combination with no soak time may decrease the precision of the assay. The aspiration/wash device should not be left standing with the Wash Solution for long periods, as the needles may get clogged resulting in poor liquid delivery and aspiration.
5. The TMB HRP-Substrate is very sensitive to contamination. For optimal stability of the TMB HRP-Substrate, pour the required amount from the vial into a carefully cleaned reservoir or preferably a disposable plastic tray to avoid contamination of the reagent. Be sure to use clean disposable plastic pipette tips (or dispenser pipette tip).
6. Be sure to use clean disposable plastic pipette tips and a proper precision pipetting technique when handling samples and reagents. Do not allow the pipette tip to touch the surface of the liquid in the well, in order to avoid carry-over. A diligent pipetting technique is of particular importance when handling the samples and the TMB HRP-Substrate solution.

Preparation of reagents	Stability of prepared reagent
ProGRP Calibrators	3 days at 2–8° C 3 months at -20° C or below

Add exactly 1.0 mL of distilled or deionised water to each vial. Allow to stand for at least 15 minutes to reconstitute and mix thoroughly before use.
NOTE: The concentration of the calibrators is stated on the labels and should be used for calculation of the results.

ProGRP Controls	3 days at 2–8° C 3 months at -20° C or below

Add exactly 1.0 mL of distilled or deionised water to each vial. Allow to stand for at least 15 minutes to reconstitute and mix thoroughly before use.
NOTE: The expected value ranges of the controls are stated on the labels.

Wash Solution	2 weeks at 2–25° C in a sealed container

Pour the 50 mL Wash Concentrate into a clean container and dilute 25-fold by adding 1200 mL of distilled or deionized water to give a buffered Wash Solution.

Antibody Solution	12 hours at 2–8 ° C

Prepare the required quantity of Antibody Solution by mixing 50 µL of Tracer, HRP Anti-ProGRP with 1 mL of Biotin Anti-ProGRP per strip (see table below and Protocol Sheet).

No. of Strips	Tracer, HRP Anti-ProGRP (µL)	Biotin Anti-ProGRP (mL)
1	50	1
2	100	2
3	150	3
4	200	4
5	250	5
6	300	6
7	350	7
8	400	8
9	450	9
10	500	10
11	550	11
12	600	12

Be sure to use a clean plastic or glass tube for preparation of Anitbody Solution.

NOTE: Do not prepare more Antibody solution than daily use.

ASSAY PROCEDURE

Perform each determination in duplicate for calibrators, controls and unknown samples. A calibration curve should be run with each assay. All reagents and samples must be brought to room temperature (20-30 °C) before use.

Please refer to specimen collection and handling section.

1. Start to prepare ProGRP Calibrators, Controls 1 & 2, Wash Solution and Antibody Solution. It is important to use clean containers. Follow the instructions carefully.
2. Transfer the required number of microplate strips to a strip frame. (Immediately return the remaining strips to the aluminum pouch containing a desiccant and reseal carefully). Wash each strip once with the Wash Solution. Do not wash more strips than can be handled within 30 min. **NOTE:** Pre-washing is essential, ensure that the wells are empty and start to add samples as soon as possible after washing.
3. Pipette 50 µL of the ProGRP Calibrators (CAL A, B, C, D, E, and F), Controls 1 & 2 and unknown specimens (unknowns-Unk) into the strip wells according to the following scheme:

	1	2	3	4	5	6	7 etc
A	Cal A	Cal E	1st Unk				
B	Cal A	Cal E	1st Unk				
C	Cal B	Cal F	2nd Unk				
D	Cal B	Cal F	2nd Unk				
E	Cal C	C1					
F	Cal C	C1					
G	Cal D	C2					
H	Cal D	C2					

4. Add 100 µL of Antibody Solution to each well using a 100 µL 8-channel precision pipette (or a 100 µL precision pipette). Do not allow the pipette tip to touch the surface of the liquid in order to avoid carry-over.
5. Incubate the frame containing the strips for 2 hour (± 10 min) at room temperature (20-30° C) with constant shaking of the plate using a microplate shaker.
6. Wash each strip 6 times, using the wash procedure described in Procedural notes, item 4 (above).
7. Add 100 µL of TMB HRP-Substrate to each well using the same procedure as in item 4 (above). The TMB HRP-Substrate should be added to the wells as quickly as possible and the time between addition to the first and last well should not exceed 5 min.
8. Incubate for 30 min (± 5 min) at room temperature (20-30° C) with constant shaking. Avoid exposure to direct sunlight.
9. Add 100 µL of Stop Solution to each well. Mix by using a microplate shaker and read absorbance at 450 nm in a microplate spectrophotometer within 5 min after addition of Stop Solution.

Measurement range

The CanAg ProGRP EIA calibration range is 0–2000 ng/L. If ProGRP concentrations above the measuring range are to be expected, it is recommended to dilute samples with Sample Diluent prior to analysis (see "Calculation of results with diluted samples").

Quality control

ProGRP Control 1 and 2 should be used for validation of the assay series. Ranges of expected results are indicated on the vial labels. If values outside of the specified range are obtained, a complete check of reagents, accuracy of pipettes, plate washer and reader performance should be made and the analysis repeated. Each laboratory may also prepare its own serum pools at different levels, which can be used as internal controls in order to assure the precision of the assay.

Reference material

Since no common reference material is available for ProGRP antigen, CanAg ProGRP EIA Calibrator values are assigned against a set of in-house reference standards.

CALCULATION OF RESULTS

If a microplate spectrophotometer with built-in data calculation program is used, refer to the manual for the spectrophotometer and create a program using the concentration stated on the label of each of the ProGRP Calibrators.
For automatic calculation of ProGRP results it is recommended to use either of the following methods:

- Cubic spline curve fit method. Calibrator A should be included in the curve with the value 0 ng/L.
- Interpolation with point-to-point evaluation. Calibrator A should be included in the curve with the value 0 ng/L.

NOTE: 4-parametric or Linear regression evaluation methods should not be used.

For manual evaluation, a calibration curve is constructed by plotting the absorbance (A) values obtained for each ProGRP Calibrator against the corresponding ProGRP concentration (in ng/L). The unknown ProGRP concentrations can then be read from the calibration curve using the mean absorbance value of each patient specimen.

NOTE: The evaluation method of calculating proGRP results should be used consistently when used in the course of monitoring a patient.

If samples in an initial analysis give ProGRP levels higher than calibrator F, then the samples should be diluted 1/10 with ProGRP Sample Diluent to obtain the accurate ProGRP concentration of the samples. Make fresh dilutions before the run. Do not exceed 1/10 dilutions.
1/10 dilution = 50 µL of specimen + 450 µL of ProGRP Sample Diluent
The ProGRP concentration of the undiluted sample is then calculated as:
Dilution 1/10: 10 x measured value
Samples that are above calibrator F after a dilution 1/10 is to be reported as: above 10x value of calibrator F i.e. if calibrator F is 2000 the value is reported as: above 20 000 ng/L.

LIMITATIONS OF THE PROCEDURE

Patients with confirmed cancer may have ProGRP values in the same range as healthy subjects. Elevated levels of ProGRP may also be found in subjects with non-malignant disease e.g. renal failure(9). Therefore, the level of ProGRP cannot be used as absolute evidence for the presence or absence of malignant disease and the ProGRP EIA should not be used in cancer screening. The results of the test should be interpreted only in conjunction with other investigations and procedures in the diagnosis of disease and the ProGRP test should not replace any established clinical examination.

Observation pairs with both values within the normal reference range should not be used for the evaluation of disease progression.
Anti-reagent antibodies (human anti-mouse antibody (HAMA) or heterophilic antibodies) in the patient sample may occasionally interfere with the assay, even though specific blocking agents are included in the buffer. Reumatoid factor in the patient sample may interfere with the assay causing falsely low proGRP values.

Biotin may interfere with the assay giving false low results. This should be taken into consideration for patients taking dietary supplements or receiving therapy containing high (> 5mg/day) or extremely high (300 mg/day) biotin doses. Peak serum levels have been reported to occur 1-3h post ingestion and a physiological half-life of 8-16h depending on renal function (21,22). In a study by Grimsey et al. (21) a specimen concentration of 30 ng/mL was reached 8h following intake of 10 mg of biotin. For patients on very high doses of biotin it is recommended to stop taking biotin for at least 2 days before blood draw (23).

EXPECTED VALUES

In a study with 626 apparently healthy individuals 99% of the subjects had ProGRP concentrations of 60 ng/L or less and 95% of the subjects had values of 43 ng/L or less. Median of serum values was 17.4 ng/L.

It is recommended that each laboratory establish its own expected reference range of interest with the population and sample collection procedures used within the laboratory.

PERFORMANCE CHARACTERISTICS

Precision

Total precision was determined according to NCCLS guideline EP5-A2 (17) using six levels of frozen pooled human serum containing added ProGRP. Each sample was randomly pipetted in duplicates and analysed twice each day over 20 days i.e. 40 runs with 40 different templates by two technicians repeated using 2 different ProGRP EIA kit lots. Data from this study is summarized below.

Sample	Reagent Lot	N	Mean conc. (ng/L)	Within-run SD (ng/L)	Within-run CV (%)	Total SD (ng/L)	Total CV (%)
1	1	80	33	2.3	6.9	3.0	9.2
	2	80	33	1.4	4.2	1.5	8.9
2	1	80	72	1.6	2.2	4.1	5.7
	2	80	74	1.4	1.9	2.3	6.3
3	1	80	97	3.7	3.8	7.0	7.3
	2	80	96	3.6	3.7	3.1	6.5
4	1	80	333	7.2	2.2	12.9	3.9
	2	80	326	4.3	1.3	8.3	5.1
5	1	80	781	12.8	1.6	35.6	4.6
	2	80	759	11.8	1.6	16.2	4.3
6	1	80	1449	33.8	2.3	59.2	4.1
	2	80	1495	28.8	1.9	36.4	4.9

Detection limit

The limit of detection (LoD) corresponds to the upper limit of the 95% confidence interval and represents the lowest concentration of ProGRP antigen that can be distinguished from zero. The NCCLS guideline EP5-A2 (18) was used to design the experiments for determination of limit of detection. A study was conducted in which the ProGRP EIA Calibrator B was diluted in Calibrator A to 10 ng/L. Thereafter Calibrator A (zero) and the Calibrator B dilution (10 ng/L) were tested in replicates of 30 per run in 4 runs on two separate days. The limit of detection of the ProGRP EIA assay was found to be < 10 ng/L.

Functional sensitivity

The functional sensitivity is expressed as the concentration of an analyte at which the total CV is 20%. A study was conducted where a five member sensitivity panel was tested in replicates of 2 in 2 runs on twenty separate days with two lots of reagents. The functional sensitivity determined for the ProGRP EIA was found to be < 20 ng/L.

Recovery

A study was performed where dilutions of an antigen solution with known concentrations of ProGRP were added to ProGRP EIA sample diluent. The concentration of ProGRP was determined using the ProGRP EIA assay and the resulting percent recovery was calculated from the ratio of Observed ProGRP Concentration/Expected ProGRP Concentration calculated from the amount of ProGRP added. Representative data from this study is summarized in the following table*:

Sample	ProGRP Antigen Added (ng/L)	Observed value Assay Value (ng/L)	Percent Recovery** %
1	80	94	117
	139	164	118
	742	821	111
	1464	1653	113
2	68	70	103
	128	135	106
	730	701	96
	1453	1518	104
3	79	83	105
	138	150	109
	741	790	107
	1463	1487	102
4	100	108	108
	157	178	114
	762	807	106
	1481	1590	107
5	108	116	108
	164	186	114
	770	829	108
	1489	1609	108

**Representative data; results in individual laboratories may vary from these data.*

***% Recovery=Observed ProGRP Concentration (ng/L)/ProGRP added (ng/L)*

The average recovery across the separate spiked concentrations shown above was found to be 108%.

High Dose Hook

No high dose hook effect was observed for samples containing up to > 1 500 000 ng/L ProGRP antigen.

Dilution Linearity

The ProGRP EIA assay mean dilution linearity is 100 ±20%. A study was conducted for the ProGRP EIA modeled after the NCCLS (CLSI) guideline EP6-A (19). Serum samples with elevated ProGRP values were diluted with ProGRP EIA Sample Diluent. The ProGRP concentration was determined for each dilution and the percent (%) recovery was calculated. Data from a representative sample from this study is presented in the following table*:

Sample	Final Dilution Factor	Obtained Value (ng/L)	Expected Value (ng/L)	Percent Recovery** (%)
A	Undiluted	1526	1526	100
	1:1.11	1344	1373	98
	1:1.25	1242	1221	102
	1:1.67	901	915	98
	1:2.5	636	610	104
	1:5	342	304	112
	1:10	147	152	97

Data from a a linearity study using the recommended 1:10 dilutions is presented in the following table*:

Sample	Final Dilution Factor	Obtained Value (ng/L)	Expected Value (ng/L)	Percent Recovery** (%)
A	Undiluted	1025	1025	100
	1:10	103	103	101
B	Undiluted	434	434	100
	1:10	48	43	111
C	Undiluted	1156	1156	100
	1:10	115	115	99

**Representative data; results in individual laboratories may vary from these data.*

***% Recovery= ProGRP Concentration obtained x Dilution factor/Undiluted ProGRP Concentration.*

Average recovery across the three diluted samples was found to be 103.6%.

Analytical Specificity

The ProGRP EIA assay mean assay specificity is 100±15%. Recovery studies were performed to compare sera containing the following compounds at the indicated concentrations with control sera. The NCCLS guideline EP7-A (20) was used to design the interference experiments. The following substances and concentrations were tested and found not to interfere with the test.

Endogenous serum interferences	Test Concentration
Triglycerides	30 mg/mL
Billirubin	0.2 mg/mL
Hemoglobin	4.5 mg/mL*
Total Protein	120 mg/mL

** For serum samples with hemoglobin concentrations above 4.5 mg/mL there is a risk of getting an elevated result with the ProGRP EIA.*

Chemotherapeutic drug interferences	Test Concentration
Carboplatin	500 µg/mL
Cisplatin	165 µg/mL
Dexamethasone	10 µg/mL
Doxorubicin	1.16 µg/mL
Leucovorin	2.68 µg/mL
Methotrexate	45 µg/mL
Paclitaxel	3.5 ng/mL

Biotin interference

A study was conducted to evaluate biotin interference. Low and high serum control samples were spiked with to final biotin concentrations of 6, 15, 30, and 60 ng/mL. The mean proGRP concentration was determined for each sample and the percent recovery for each biotin concentration was calculated using the formula: Recovery (%) = 100x (Mean proGRP concentration w. biotin added/ Mean proGRP concentration w. diluent only added).

ProGRP analyte level	Biotin test conc. (ng/mL)	Expected ProGRP conc. (ng/L)	Observed ProGRP conc. (ng/L)	Recovery (%)
Low	6	133	130	97
High 1	6	561	540	96
High 2	6	996	975	98
Low	15	131	117	89
High 1	15	582	542	93
High 2	15	1034	947	92
Low	30	136	114	84
High 1	30	601	499	83
High 2	30	1057	900	85
Low	60	131	91,2	70
High 1	60	548	365	67
High 2	60	1013	652	64

Based on linear regression analysis, the lowest concentration of biotin found to influence test results (≥10%) was 18 ng/mL.

Potentially interfering clinical conditions

The ProGRP EIA assay was evaluated using specimens with HAMA and Rheumatoid Factor (RF) to further assess the assay specificity. Six specimens positive for HAMA and five specimens positive for RF were evaluated for percent recovery with ProGRP antigen spiked into each specimen at low and high concentrations.

HAMA: The grand mean recovery of ProGRP in the presence of HAMA was 101% and the individual recoveries ranged from 93–111%.

RF: The grand mean recovery was 79%, in specimens positive for Rheumatoid factor. Patients with abnormal levels of rheumatoid factor may thus have underestimated ProGRP values.

CLP (1272/2008) HAZARD CLASSIFICATION

The following warnings and precautions apply to SUBS | TMB

Hazard pictograms:

Signal word:	Danger
Hazard Statement:	Repr. 1B: H360D May damage the unborn child.
Prevention statement:	P202 Do not handle until all safety precautions have been read and understood.
Prevention:	P280 Wear protective gloves / protective clothing / eye protection / face protection.
Precautionary statement response:	P308+P313 IF exposed or concerned get medical advice/attention.
Precautionary statement distposal:	P501 Dispose of contents / container to an approved hazardous / special waste disposal facility in accordance with local and national regulations.

Restricted to professional users.

Hazardous substances: 2- Pyrrolidone

Other hazards

None of the mixtures in the kit contains any substances considered to meet the criteria classifying them as PBT and/or vPvB.

WARRANTY

Any change or modification of the procedure not recommended by Fujirebio Diagnostics may affect the results, in which event Fujirebio Diagnostics disclaims all warranties expressed, implied or statutory including the implied warranty of merchantability and fitness for use.

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FUJIREBIO®
Diagnostics, Inc.

Fujirebio Diagnostics AB
Elof Lindälvs gata 13
SE-414 58 Göteborg
Sweden
Phone + 46 31 85 70 30
Fax + 46 31 85 70 40
info@fdab.com
www.fdab.com

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