

## Information for Use

# Haemoglobin A1c Liquid Control Levels 1 and 2



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**en** Instructions For Use in multiple languages are available on our website: [www.canterburyscientific.com](http://www.canterburyscientific.com) under the "Products and Instructions for Use" section. A paper version can be obtained by fax +64 3 3433342 or e-mail: [info@canterburyscientific.com](mailto:info@canterburyscientific.com).



This product contains human or animal source materials and should be treated as potentially infectious.

**fr** Le mode d'emploi est disponible en plusieurs langues sur notre site internet : [www.canterburyscientific.com](http://www.canterburyscientific.com) dans la rubrique « Products and Instructions for Use [Produits et mode d'emploi] ». Un exemplaire papier peut être obtenu en envoyant une demande par fax au +64 3 3433342 ou par e-mail à l'adresse : [info@canterburyscientific.com](mailto:info@canterburyscientific.com).



Ce produit contient des substances d'origine animale ou humaine et doit, par conséquent, être considéré comme un produit potentiellement infectieux.

**de** Gebrauchsanweisungen in mehreren Sprachen stehen auf unserer Website zur Verfügung: [www.canterburyscientific.com](http://www.canterburyscientific.com) im Bereich „Produkte und Gebrauchsanweisungen“. Ein gedruckte Version kann per Fax über +64 3 3433342 oder per E-Mail angefordert werden: [info@canterburyscientific.com](mailto:info@canterburyscientific.com).



Dieses Produkt enthält Ausgangsstoffe menschlichen und tierischen Ursprungs und muss als potenziell infektiös gehandhabt werden.

**es** Las Instrucciones de uso están disponibles en múltiples lenguas en nuestra página web: [www.canterburyscientific.com](http://www.canterburyscientific.com) en la sección "Productos e instrucciones de uso". Puede solicitar un ejemplar impreso en el n.º de fax +64 3 3433342 o en el correo electrónico: [info@canterburyscientific.com](mailto:info@canterburyscientific.com).




Este producto contiene materiales de origen humano o animal y debe ser manipulado como potencialmente infeccioso.

it	Sul nostro sito Web sono disponibili le istruzioni per l'uso in varie lingue: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> nella sezione "Products and Instructions for Use" (Prodotti e istruzioni per l'uso). È possibile ricevere una versione cartacea inviando un fax al numero +64 3 3433342 o scrivendo un'e-mail all'indirizzo: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Questo prodotto contiene materiali di origine umana o animale e deve essere trattato come potenzialmente infettivo.
nl	Op onze website is de gebruiksaanwijzing in meerdere talen beschikbaar: zie <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> onder het gedeelte "Producten en gebruiksaanwijzingen". Gedrukte versies kunnen worden aangevraagd via fax +64 3 3433342 of e-mail: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Dit product bevat materialen van menselijke en dierlijke oorsprong en moet worden behandeld als mogelijk infectieus.
pt	No nosso site da internet, poderá encontrar Instruções de Utilização em várias línguas: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> na secção "Produtos e Instruções de Utilização". Poderá obter uma versão em papel pelo fax +64 3 3433342 ou e-mail: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Este produto contém materiais de origem humana ou animal e deve ser considerado como potencialmente infeccioso.
hu	A Használati utasítás több nyelven elérhető honlapunkon a <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> címen, a „Products and Instructions for Use” (Termékek és Használati utasítások) című részen. A nyomtatott verzió fax (+64 3 3433342) vagy e-mail ( <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> ) útján szerezhető be.  Ez a termék emberi, illetve állati forrásból származó anyagokat tartalmaz, és potenciálisan fertőző anyagként kell kezelni.
sv	Brüksanvisning på flera språk finns på vår hemsida: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> under avsnittet "Produkter och bruksanvisningar". En pappersversion kan erhållas via fax +64 3 3433342 eller e-post: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Denna produkt innehåller material av human eller djursprung och ska behandlas som potentiellt smittsam.
tu	Birçok dilde Kullanım Talimatları Web sitemizde mevcuttur: "Products and Instructions for Use" (Ürünler ve Kullanım Talimatları) bölümü altında <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> adresinde. Basılı sürüm faks +64 3 3433342 veya e-posta ile sağlanabilir: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Bu ürün insan veya hayvan kaynaklı materyaller içermektedir ve potansiyel olarak bulaşıcı olduğu düşünüldükçe işlem yapılmalıdır.
bg	Инструкциите за употреба на различни езици можете да намерите на нашия уебсайт: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> в раздел "Products and Instructions for Use" ("Продукти и инструкции за употреба"). Можете да се добиете с техния хартиен вариант чрез факс +64 3 3433342 или на имейл: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Този продукт съдържа материали от човешки или животински произход и следва да се третира като потенциално заразен.
cz	Návod k použití v několika jazycích je k dispozici na našich webových stránkách: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> v části „Výrobky a návod k použití“. Tištěnou verzi lze získat faxem +64 3 3433342 nebo e-mailem: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Tento výrobek obsahuje lidské nebo zvířecí zdrojové materiály a musí tedy být považován jako potenciálně infekční.
da	Brugsanvisninger er tilgængelige på flere sprog på vores website: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> i sektionen "Products and Instructions for Use". En trykt udgave kan fås via fax ved henvendelse på tlf. +64 3 3433342 eller e-mail: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Dette produkt indeholder humane eller animalske kildematerialer og skal behandles som potentielt infektøst.
it	Naudojimo instrukcijas keliomis kalbomis galima rasti mūsų interneto svetainėje <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> , skyriuje „Produktai ir naudojimo instrukcijos“. Popierinę versiją galima gauti faksu +64 3 3433342 arba el. paštu <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Šio produkto sudėtyje yra žmogaus ir gyvūnų kilmės medžiagų, todėl jį reikia laikyti potencialiai infekciniu.
fi	Sivustoltamme löytyy käyttöohjeet useilla eri kielillä: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> , osa "Tuotteet ja käyttöohjeet". Voit hankkia tulostetun version faksamalla numeroon +64 3 3433342 tai lähettämällä sähköpostia osoitteeseen: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Tämä tuote sisältää ihmis- tai eläinperäisiä lähdemateriaaleja ja sitä on käsiteltävä mahdollisen tartuntavaaran aiheuttavana tuotteena.
el	Οδηγίες χρήσης σε διάφορες γλώσσες είναι διαθέσιμες στον δικτυακό τόπο μας: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> στην ενότητα «Προϊόντα και οδηγίες χρήσης». Έντυπη μορφή μπορεί να ληφθεί μέσω φαξ +64 3 3433342 ή e-mail: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Αυτό το προϊόν περιέχει υλικά ανθρώπινης ή ζωικής προέλευσης και πρέπει να αντιμετωπίζεται ως δυνητικά μολυσματικό.
ru	Инструкции по эксплуатации на разных языках имеются на нашем интернет-сайте: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> в разделе Products and Instructions for Use (Продукция и инструкции по эксплуатации). Бумажную версию можно получить по факсу: +64 3 3433342 или электронной почте: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Данный препарат содержит материалы человеческого или животного происхождения и должен рассматриваться как потенциально инфицированный.
ar	تتوفر إرشادات الاستخدام بعدة لغات على موقعنا على ويب: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> قسم "المنتجات وإرشادات الاستخدام". يمكن الحصول على نسخة ورقية بالفاكس على رقم +64 3 3433342 أو بالبريد الإلكتروني: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  يحتوي هذا المنتج على مواد ذات مصدر بشري أو حيواني ويجب التعامل معها على أنها من المحتمل أن تكون معدية.
hr	Upute za uporabu na raznim jezicima dostupne su na našoj web stranici: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> pod odjeljkom „Proizvodi i upute za upotrebu“. Papirnata se verzija može dobiti telefakskom na broj +64 3 3433342 ili e-poštom: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Ovaj proizvod sadrži ljudski ili životinjski izvor materijala i treba biti tretiran kao potencijalno zarazan.
sk	Pokyny na použitie v rôznych jazykoch sú dostupné na našej webovej stránke: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> v časti „Produkty a pokyny na použitie“. Papierovú verziu je možné získať faxom na číslo +64 3 3433342 alebo e-mailom: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Tento produkt obsahuje materiály ľudského alebo zvieracieho pôvodu a malo by sa s ním zaobchádzať ako s potenciálne infekčným materiálom.
ro	Instrucțiunile de utilizare în mai multe limbi sunt disponibile pe site-ul nostru: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> la secțiunea "Products and Instructions for Use" (Produse și instrucțiuni de utilizare). Se poate obține o versiune tipărită prin trimiterea unui fax la numărul +64 3 3433342 sau a unui e-mail la adresa: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Acest produs conține materiale sursă umane sau animale și trebuie tratat ca fiind un produs potențial infecțios.
Other customers / Autres clients / Andere Kunden / Otros clients / Altri clienti / Overige klanten / Outros clients / Más ügyfelek / Andra kunder / Diğer müşteriler / Други клиенти / Ostatní zákazníci / Andre kunder / Kiti klientai / Muut asiakkaat / Άλλοι πελάτες / 其他客户 / その他の地域のお客様 / Прочие клиенты / العملاء الآخرين /	
cs	在本公司网站上提供多种语言版本的《产品使用说明书》，网址 <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> ；在网站首页的“Products and Instructions for Use”（产品与使用说明书）部分，可找到这些文档。纸质印刷版本可发传真至+64 3 3433342 或发送电子邮件至 <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> 索取。  本产品含有人或动物来源的材料，应作为潜在传染性材料对待。
ja	他言語版の「ご使用上の注意」を当社ウェブサイト（ <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> ）の「Products and Instructions for Use」セクションで入手できます。印刷版はファックス（+64 3 3433342）又は電子メール（ <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> ）で入手できます。  本製品にはヒト又は動物由来の原料が含まれているため、感染症の可能性のあるものとしてお取り扱いください。
vi	Hướng dẫn sử dụng bằng nhiều ngôn ngữ có sẵn trên trang web của chúng tôi: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> , trong phần "Sản phẩm và Hướng dẫn Sử dụng". Bạn có thể nhận bản in qua fax theo số: +64 3 3433342 hoặc qua e-mail: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Sản phẩm này chứa nguyên liệu có nguồn gốc từ con người hoặc động vật, do đó, nên được xử lý như sản phẩm có thể lây nhiễm.
kk	Бірнеше тілде қолдану жөніндегі нұсқаулықтар біздің веб-сайтта қол жетімді: <a href="http://www.canterburyscientific.com">www.canterburyscientific.com</a> сайтында «Өнімдер мен пайдалану нұсқаулары» бөлімінде. Қағаз нұсқасын +64 3 3433342 факсы немесе электрондық пошта арқылы алуға болады: <a href="mailto:info@canterburyscientific.com">info@canterburyscientific.com</a> .  Бұл өнімде адам немесе жануарлар көздерінен алынған материалдар бар және оны жұқпалы болуы мүмкін деп қарау керек.

## Description and Intended Use

The extendSURE™ Haemoglobin A1c liquid controls **CONTROL** are prepared from human blood and contain normal haemoglobin, preservatives and stabilizers. The controls are formulated to give enhanced stability.

The Level 2 control is produced by a process of controlled *in vitro* glycation of non-diabetic blood.

The controls are designed for use as quality control materials to monitor the accuracy and precision of laboratory testing procedures for HbA1c quantitation for the following assay types: ion exchange HPLC, immunoassay and enzymatic procedures.  For specific application in a particular assay refer to the analyser's operating manual. The control is not to be used as a calibrator. Good laboratory practice dictates that a quality control program be established in all laboratories. This program consists of the routine assay of these controls by trained laboratory personnel and evaluation of the documented results against laboratory acceptable limits. If results are outside these limits re-run the control and investigate method parameters, environmental factors and techniques. If after re-running the control the result(s) continues to remain outside the acceptable limits, contact the manufacturer of the control for further control interpretation assistance.

Further good laboratory practice dictates that control samples and results be quarantined from patient samples and results.

## Clinical Application of Haemoglobin A1c Measurement

The measurement of HbA1c is especially useful in the diabetic patient. Blood glucose levels fluctuate widely and instantaneous blood glucose testing does not reflect the averaged situation. The formation of HbA1c occurs slowly (about 0.05%/day) and continuously during the 120-day lifetime of the red cell. The measurement of HbA1c is useful to physicians as a long-term integral of blood glucose concentration and thus as a measure of the degree of control or self-management by the diabetic patient. However, each laboratory should determine a reference interval that corresponds to the characteristics of the population being tested. Each percentage point increase in HbA1c level corresponds to an increase in average blood glucose level of about 30 mg/dL or 1.7 mmol/L. As a general rule HbA1c levels above 10% represent poor diabetic control, whereas values between 6.5% and 7.5% are indicative of good control.

### Kit Contents

**REF** B12396

#### Description:

- 2 vials of extendSURE™ Haemoglobin A1c liquid control Level 1 of 1.0 mL fill.
- 2 vials of extendSURE™ Haemoglobin A1c liquid control Level 2 of 1.0 mL fill.
- 1 Information Sheet.
- 3 Lot Specific Value Assignment Cards

### Precautions/Warnings

#### WARNING



#### Potentially Biohazardous Material

Human red cells were used as a source material in the manufacture of the controls. Each unit was obtained from blood donors and tested by FDA accepted methods and found non reactive for Hepatitis B surface antigen, Anti-HCV, Anti-HIV 1 & 2 and Syphilis. No test method can offer complete assurance that the control containing human sourced materials will be absent of these and other infectious agents. Good laboratory practice dictates that all human source material should be considered potentially infectious and be handled with the same precautions used with patient specimens.




#### CAUTION

- **Please READ through this INFORMATION SHEET before using the control materials.**
- **FOR IN VITRO DIAGNOSTIC **IVD** USE.**
- **SAFETY CLOTHING (glasses, gloves and laboratory coat) are RECOMMENDED when using these controls.**
- **Discarded or spilt controls should be treated and disposed of as directed by your laboratory safety guidelines or by local ordinance.**
- **This PRODUCT CONTAINS a small amount of POTASSIUM CYANIDE. DO NOT INGEST.**
- **DO NOT USE CONTROLS BEYOND USE BY DATE and only use one control lot at a time.**
- **If there is evidence of MICROBIAL CONTAMINATION or BROWN DISCOLORATION or PRECIPITATION in the controls, discard the vial.**

### Storage and Handling

The product must be stored protected from light, preferably in the original box.

#### Unopened

The extendSURE™ Haemoglobin A1c liquid unopened control vials should be stored in an upright position at 2-8°C. Controls can be used until the last day of the use by month  shown on the bottle and is stable for 30 months from the date of manufacture.

#### Opened

The extendSURE™ Haemoglobin A1c liquid opened control vials should be stored in an upright position at 2-8°C. Once the controls are opened; they can be used for 30 days when stored tightly capped. The controls should not be frozen and thawed.

### Control Procedure

The extendSURE™ Haemoglobin A1c liquid controls are ready for use and should be treated in the same manner as unknown patient specimens and run in accordance with the manufacture's instructions accompanying the respective instrument/method. The controls exhibit column elution profiles comparable to patient whole blood haemolysates.

