Product Specification

Fragile X Genemer™ Control DNA

For PCR amplification of the Fragile X CGG triple repeat region**
*Special optimized conditions required for amplification

Shipped at ambient temperature Store at -20°C

For research use only. **Not for use in diagnostic procedures for clinical purposes**

Product Supplied	Catalog Number	Product Description	Size
❑	40-2004-01	GLFX ~16 CGG repeat Genemer Control DNA	500 ng
❑	40-2004-02	GLFX ~29 CGG repeat Genemer Control DNA	500 ng
❑	40-2004-03	GLFX ~40 CGG repeat Genemer Control DNA	500 ng
❑	40-2004-04	GLFX ~60 CGG repeat Genemer Control DNA	500 ng
❑	40-2004-05	GLFX ~90 CGG repeat Genemer Control DNA	500 ng

****Important Product Description & Use Limitation**
The Fragile X CGG repeat region control DNA's are cloned products. These have been developed by inserting varying number of CGG repeats to serve as control DNA specifically for use with the Fragile X Genemer™ detection system. The above control DNA is an ideal genotyping template for optimizing and performing control amplification.

The size of the CGG repeats has been determined by sequencing and gel electrophoresis. The stability of size repeats upon cloning and amplification has NOT been determined. Thus, the size should be considered approximate and there is no claim for each fragment to contain the exact number of CGG repeats. These control DNA's are sold with the express condition that these NOT be used for exact CGG size determination of DNA of unknown genotype. The control DNA should be used for determining the performance of specific Gene Link products listed below.

Fragile X PCRProber™ Kit Catalog No. 40-2004-32
Fragile X Genemer™ Catalog No. 40-2004-10
Fragile X GScan™ Kit Catalog No. 40-2004-15XX

Material Supplied

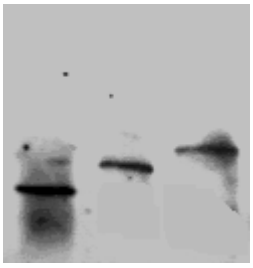
A tube containing 500 ng of lyophilized DNA segment of the specified CGG repeat fragment spanning the CGG repeat . The quantity supplied is sufficient for 1000 regular 50µl PCR** reaction.

Reconstitution
Stock Solution: Add 100µl sterile water to the tube containing the lyophilized DNA to yield a solution of 5 ng/µl.
Working Solution: Dilute 1:10 an aliquot of the stock solution.
Usage: Initially use 1µl each of the stock and working template solution for amplification and optimization of the reaction. Dilute further based on results obtained. Use 1µl of template at the lowest concentration.

Product Use

This product is specifically for use with products listed. Please refer to the Instruction Manual provided with the product. The instruction manuals are available online at www.genelink.com

Triple Repeat Size Analysis
Important Note: PCR** amplification of the CGG triple repeat region is not amplified using regular PCR reaction conditions due to the long stretch of CGG in the target amplification fragment. The inclusion of deaza GTP considerably overcomes this limitation. Long expansion of the CGG repeat on some DNA sample may still fail to amplify. Proper optimization needs to be carried out for such DNA samples. PCR amplification can also be achieved by direct label incorporation of ^{35}S or ^{33}P dATP during PCR or by using ^{32}P end labeled primers.



Fragile X PCR blot. CGG repeats control DNA
Lane 1, 16 CGG repeats; lane 2, 29 CGG and lane 3, 40 CGG repeats
Chemi-luminescent detection, ~20 minute exposure.

GScan™ Kits Product Ordering Information

Kits for performing fluorescent PCR amplification based detection. Various dye kits.
XX=FM for 6-Fam; HX for Hex; TT for Tet; C3 for Cy3 and C5 for Cy5. 1 kit = 100 rxns.

Product	Size	Catalog No.	Price, $
Fragile X GScan™ Kit for fluorescent detection	1 kit	40-2004-15XX	650.00
Huntington's Disease GScan™ Kit for fluorescent detection	1 kit	40-2025-15XX	650.00
Myotonic Dystrophy GScan™ Kit for fluorescent detection	1 kit	40-2026-15XX	650.00
Friedreich's Ataxia GScan™Kit for fluorescent detection	1 kit	40-2027-15XX	650.00
Kennedy Disease GScan™ Kit for fluorescent detection	1 kit	40-2032-15XX	650.00
SCA 1 GScan™ Kit for fluorescent detection	1 kit	40-2037-15XX	650.00
SCA 2 GScan™ Kit for fluorescent detection	1 kit	40-2038-15XX	650.00
SCA 3 GScan™ Kit for fluorescent detection	1 kit	40-2039-15XX	650.00
SCA 6 GScan™ Kit for fluorescent detection	1 kit	40-2040-15XX	650.00
SCA 7 GScan™ Kit for fluorescent detection	1 kit	40-2041-15XX	650.00
DRPLA GScan™ Kit for fluorescent detection	1 kit	40-2042-15XX	650.00

Fragile X Product Ordering Information

Product	Size	Catalog No.	Price, $
Fragile X Genemer™ Primer pair Primers for amplification of CGG triple repeat spanning region. The quantity supplied is sufficient for 400 regular 50 µl PCR reactions.	10 nmole	40-2004-10	100.00
Fragile X GeneProber™ GLFX1 Probe unlabeled Fragile X CGG triple repeat spanning region unlabeled probe for radioactive labeling and Southern blot detection. Suitable for random primer labeling.	500 ng	40-2004-40	350.00
Fragile X GeneProber™ GLFXDig1 Probe Digoxigenin labeled Fragile X CGG triple repeat spanning region digoxigenin labeled probe for non-radioactive Southern blot detection.	110 µl	40-2004-41	400.00
Fragile X PCRProber ™ AP labeled probe Alkaline phosphatase labeled probe	12 µl	40-2004-31	400.00
Fragile X PCRProber ™ Kit for chemiluminescent detection Kit for performing PCR amplification and chemiluminescent based detection.	5 blots [50 rxns]	40-2004-32	650.00
Fragile X Genemer™ Kit for Radioactive Detection Kit for amplification and radioactive detection of Fragile X CGG triple repeat region amplified PCR products using ^{35}S or ^{32}P. 100 Reactions.	100 [rxns]	40-2004-20	650.00
Fragile X GScan™ Kit for fluorescent detection Kit for performing fluorescent PCR amplification based detection. Various dye kits. XX=FM for 6-Fam; HX for Hex; TT for Tet; C3 for Cy3 and C5 for Cy5.	1 Kit [100 rxns]	40-2004-15XX	650.00

Genemer™ control DNA Cloned fragment of the mutation region of a particular gene. These control DNA's are ideal genotyping templates for optimizing and performing control amplification with unknown DNA. The size of the triple repeats has been determined by sequencing and gel electrophoresis. The stability of size repeats upon cloning and amplification has NOT been determined. Thus, the size should be considered approximate and there is no claim for each fragment to contain the exact number of triple repeats. These control DNA's are sold with the express condition that these NOT be used for exact triple repeat size determination of DNA of unknown genotype. The control DNA should be used for determining the performance of specific Genemer™ and PCRProber™ Gene Link products.

Fragile X ~16 CGG repeat Genemer Control DNA	500 ng	40-2004-01	175.00
Fragile X ~29 CGG repeat Genemer Control DNA	500 ng	40-2004-02	175.00
Fragile X ~40 CGG repeat Genemer Control DNA	500 ng	40-2004-03	175.00
Fragile X ~60 CGG repeat Genemer Control DNA	500 ng	40-2004-04	175.00
Fragile X ~90 CGG repeat Genemer Control DNA	500 ng	40-2004-05	175.00

Please visit www.genelink.com for other Genemer™ control DNA not listed here

Genemer™ Control DNA (Selected List) Control DNA for use with gene or mutation specific Genemer™

Product	Size	Catalog No.	Price, $
Fragile X, various CGG triple repeat region control DNA	500 ng	40-2004-XX	175.00
Huntington Disease various CAG triple repeat region control DNA	500 ng	40-2025-XX	175.00
Myotonic Dystrophy various CTG triple repeat region control DNA	500 ng	40-2026-XX	175.00
Friedreich's Ataxia, various GAA triple repeat region control DNA	500 ng	40-2027-XX	175.00

***Please visit www.genelink.com for other Genemer™ not listed here**

**The polymerase chain reaction (PCR) process is covered by patents owned by Hoffmann-La Roche. A license to perform is automatically granted by the use of authorized reagents.
Prices subject to change without notice All Gene Link products are for research use only