Product Specification Summary

GScan™ Genemer Controls

Catalog Number	40-2038-01
Product Name	SCA2 22 repeat (19 CAG + 3 CAA) GScan & Genemer Control DNA
Size	500 ng
Description	SCA2 22 repeat (19 CAG + 3 CAA) GScan™ & Genemer™ Control DNA
Component/Note	SCA2 22 Repeats (19 CAG + 3 CAA) GScan & Genemer Control DNA. Contains 19 CAG & 3 CAA repeats as deterr sequence analysis.

Product Description
SCA2 Genemer control DNA containing 19 CAG & 3 CAA repeats. This product is used to run as control DNA in the amplification of CAG repeat region of SCA2 CAG triple repeats. The control DNA spans the CAG repeat region of the ATXN2 gene.

Background
The autosomal dominant cerebellar ataxias (ADCA) are a heterogeneous group of neurodegenerative disorders characterized by progressive degeneration of the cerebellum, brain stem and spinal cord. Spinocerebellar ataxia (SCA) type 2 is characterized by deterioration in balance and coordination, slow saccadic eye movement, and in some individuals opthalmoparesis. SCA2 is inherited in an autosomal dominant manner. Offspring of an affected individual have a 50% chance of inheriting the gene mutation. The mutation in all identified SCA genes is the expansion of an unstable CAG repeat encoding a polyglutamine tract. Similar to other trinucleotide repeat disorders, such as Huntington disease and spinal and bulbar muscular atrophy, the SCAs show anticipation and different degrees of expansion in maternal or paternal transmission. There is a direct correlation between the size of the CAG repeat and the onset and severity of the disease. Affected adult individuals have alleles with 36-64 CAG trinucleotide repeats, while infantile- and juvenile-onset SCA2 is associated with expansions of 130 to more than 200 CAG trinucleotide repeats. The SCA2 locus has been mapped to chromosome 12q24. Several SCA genes have been cloned and shown to contain CAG repeats in their coding regions. Spinocerebellar ataxia (SCA) 1, 2, 3, 4 and 6, being assigned to five different chromosomes.

Genotyping
SCA2 is the only gene known to be associated with SCA2. One hundred percent of individuals affected with SCA2 have an SCA2 CAG trinucleotide repeat expansion. The presence of one abnormal allele is diagnostic. Normal alleles CAG repeats are below 30. DNA analysis can detect 100% of expanded alleles.

Scan the QR Code or visit the following links

Product Infomation http://www.genelink.com/geneprodsite/product.asp?p=795

Product Manual http://www.genelink.com/Literature/ps/M40-2038-01_V2.2.pdf

Product MSDS http://www.genelink.com/Literature/ps/MSDSNH.pdf

Related Products

Product	Catalog No	Size
GLFX 29 CGG repeat GScan Genemer Control DNA; 25 uL	40-2004-02HX	25 uL
GLFX 16 CGG repeat GScan Genemer Control DNA; 25 uL	40-2004-01HX	25 uL
GLFX 40 CGG repeat GScan Genemer Control DNA; 25 uL	40-2004-03HX	25 uL
GLHD 7 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-05HX	25 uL
GLHD 18 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-01HX	25 uL
GLHD 31 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-07HX	25 uL
GLHD 34 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-02HX	25 uL
GLHD 37 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-08HX	25 uL
GLHD 44 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-03HX	25 uL
GLHD 89 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-04HX	25 uL
GLHD 49 CAG repeat Scan Hex labeled ready to run Control DNA; 25 uL	40-2025-09HX	25 uL
GLHD 116 CAG repeat GScan Genemer Control DNA; 25 uL	40-2025-06HX	25 uL
GLHD 134 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-61HX	25 uL
GLHD 182 CAG repeat GScan Hex labeled ready to run Control DNA; 25 uL	40-2025-62HX	25 uL
GLDM 12 CTG repeat GScan Genemer Control DNA; 25 uL	40-2026-01HX	25 uL