# Product Specification Summary

## FMR2/AFF2/FRAXE

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| Catalog Number | 40-2054-15FMS |
| Product Name | FRAXE/FMR2/AFF2 GGscan Kit CCG Repeat Genotyping. 20 rxns |
| Size | 1 kit |
| Description | FRAXE/FMR2/AFF2 GGscan Kit CCG Repeat Genotyping. 20 rxns |

FRAXE/FMR2/AFF2 GGscan Kit is an optimized kit for genotyping the CCG repeat. The amplified fragments can be resolved by fluorescent genetic analyzer to determine the size the the fragments. These can also be resolved by agarose gels.

Gene Link's GScan gene detection products are safe, convenient and sensitive, and afford automated compilation of data. Kits are available for reliable genotyping of the Fragile X, Huntington's Disease, Myotonic dystrophy and other triple repeat mutation group disorders. The kits contain optimized PCR amplification reagents and a wide array of fluorescent-labeled primers for genotyping after PCR using fluorescent genetic analyzer instrument. Included in these kits are ready-to-run control samples of various repeats of the triple repeat disorder kit. These control samples are for calibration with the molecular weight markers for accurate size determination of the amplified fragments. The GScan kits are simple and robust for routine triple-repeat detection of greater than 100 repeats of all triple repeat disorders listed.

FMR2/AFF2/FRAXE FRAXE mental retardation is the cause of a non-syndromic X-linked mental retardation affecting 1/50,000 newborn males. The CCG repeat of FRAXE can either expand or contract and is equally unstable when transmitted through the male or the female germ line. The detection of amplification/expansion of a region of DNA sequence can be detected by PCR and Southern, these methods can be used for all disorders involving increase in size of a region of DNA. Southern blot analysis for FRAXE mutation detection involves the cleavage of DNA with enzyme Not I and Afl III. This method detects the size of CCG repeats region by hybridization of AFF2 AJ31-Dig1 GeneProber to DNA that has been double digested with restriction enzymes Not I and Afl III and blotted onto a membrane. In normal females two fragments are seen, a 2.2kb corresponding to the active X and a 4.8kb fragment corresponding to the methylated inactive X chromosome. Normal males exhibit only the 2.2kb banding pattern. Affected males will have an amplified CCG repeats region with methylation thus giving rise to fragments larger than the normal 4.8kb. Premutations in males and females will be seen as fragments from 2.3-3.3kb (normal 2.2kb) derived from the X chromosome. Premutations in females derived from the inactive X will give fragments from 4.9- ~6kb. Mosaicism is characterized by fragments appearing as a mixture of full mutation (methylated, larger than 4.8kb) and unmethylated premutation (2.2-3.3kb). Gene Link has developed non-radioactive detection methods probe for Southern blot and GScan PCR based methods for fluorescent detection and Genemer kits for agarose gel based detection kits.

Scan the QR Code or visit the following links

Product Infomation http://www.genelink.com/geneprodsite/product.asp?p=17366

Product Manual http://www.genelink.com/Literature/ps/M40-2054-15Ver6.5.pdf

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

**Related Products**

| Product | Catalog No | Size |
|---|---|---|
| FRAXE/FMR2/AFF2 GGscan Kit CCG Repeat Genotyping; 100 rxns. | 40-2054-15FM | 1 Kit |
| FRAXE/FMR2/AFF2 GGscan Kit CCG Repeat Genotyping. 20 rxns | 40-2054-15FMS | 1 kit |
| FRAXE/FMR2/AFF2 CCG Repeat Genotyping GeneProber$^{TM}$ AFF2-AJ31Dig1 | 40-2054-41 | 110 uL |