

AneuSure[®] Max Plus v2

CAT# GT-11112






QF PCR kit for rapid detection of chromosomal aneuploidies for chromosomes 13, 18, 21, X and Y



With the AneuSure Max Plus v2 Kit, amplification of 35 markers in a multiplex PCR reaction is carried out. All markers have been selected to have high heterozygosity and are distributed throughout the human chromosomes 13, 18, 21, X, and Y. The kit also contains primers for quantifying exon 7 of the SMN1 and SMN2 genes. Deletion of exon 7 of the SMN1 gene is seen to be present in 95-98% of 5q SMA cases. DNA template for AneuSure Max Plus v2 can be extracted from several sources, including amniotic fluid (AF), chorionic villus (CVS), and blood. To prevent sample mix-up and ensure the fetal sample's originality, we recommend that the sample from the mother be amplified and used as a reference (please follow national guidelines). Another advantage of this kit is the reliable detection of Turner syndrome (Monosomy of X) by using the 7X, 11X and 18X segmental duplication markers by quantifying chromosome X.

AneuSure[®] Max Plus v2 kit components and storage conditions

- Prevent exposure of primer mix to direct light. This may have an impact on the intensity of the fluorescent dye.
- Store all components at -20°C.
- Avoid repeated freezing-thawing cycles to maintain the good quality of the kit. We recommend aliquoting the components if necessary.

Table 1: Provided with the Kit are Box A and Box B. They should be kept separately.

BOX-A		
	Tube Label	Tube cap colour
1	PCR Mix	
2	Primer Mix	
3	GT HSTaq	
4	GT QCDF150(Control DNA-50ng/μl)	
5	GT QCW (H2O)	

BOX-B		
	Tube Label	Tube cap colour
1	GT600 Size Standard	
2	GTM6 v2 (Optional)	

Instructions

1. Bring all components to room temperature.
2. Vortex Primer Mix and PCR Mix and spin down briefly to remove all residues from the lid. Gently mix the enzyme by inverting or pipetting.
3. Prepare a Master Mix for your reaction according to the following recipe. Every preparation can be done at room temperature.

Table 2: PCR reaction set-up

Component	Volume for 1 reaction[μl]
GT QCW (H2O)	10
PCR Mix	7
Primer Mix	1
GT HSTaq	1

4. Vortex Master Mix briefly.
5. Transfer 19μl of Master Mix to each 0.2ml PCR tube for each sample you want to analyze.

6. Add 1µl of DNA template (5-10 ng per reaction) to each PCR tube.
7. Vortex and spin down each PCR tube. Make sure that no droplets are left at the tube wall or lid.
8. Place tubes into thermal cycler.
9. Please use the following PCR program for the amplification of all markers.
10. Store the PCR products at 2-6°C until analysis with Genetic Analyzer.

Table 3: PCR program

Initial step	Cycling			Final Extension	Storing in Cycler
	Denaturation	Annealing	Extension		
95 °C	95 °C	63 °C	70 °C	70 °C	4 °C
20 min	1 min	90 sec	2 min	17-20 min	∞
27-30 Cycles					

Note

- We recommend storing PCR product at 2-6°C in a dark place (fluorescent dyes!)
- The quality of the results will reduce with increased time gap (more than 2 weeks!) between PCR amplification and capillary electrophoresis.
- A quality control (provided in the kit) and a negative control should be run in each Multiplex PCR to verify successful amplification of each marker.
- Varying quantity of DNA template may require different numbers of cycles in PCR program. Please see “AneuSure[®] Max Plus v2 User Manual” for further information.

WARNING

After PCR is complete, tubes should never be opened in the PCR setup area or beside kit components. Risk of contamination!

How to analyze data from AneuSure[®] Max Plus v2 Kit

- AneuSure[®] Max Plus v2 Kit is optimized for usage on ABI PRISM Genetic Analyzer like ABI3500/xL. Make sure your ABI Data Collection Software supports 6-dye fragment analysis.
 - Perform Spectral Calibration using GTM6 v2 Matrix Standard (supplied by Genetek).
 - We recommend verifying a successful Multiplex PCR by gel electrophoresis before analyzing it on a Genetic Analyzer.
 - Prepare PCR products for capillary electrophoresis according to the ABI protocol.
- Analyze the samples using the AneuSure[®] Max Plus v2 GeneMapper Panel provided on our website.

Note

- For further information regarding AneuSure[®] Max Plus v2 Kit please see “AneuSure[®] Max Plus v2 User Manual”. It includes recommendations for different DNA amounts per reaction, table containing the names and sizes of all amplified markers as well as troubleshooting.
- To simplify the analysis of your samples, we provide a panel.
- Please find all documents regarding AneuSure[®] Max Plus v2 Kit on our website: www.genetek-biopharma.com.
- It may arise that alleles fall outside their size range and overlap with the size range of another locus. This appears at low frequencies in some populations.
- For any further clarification, please contact our technical service via email: (support@genetek.de).