QC Plex

Rapid multiplex PCR assay for qualitative assessment of genomic DNA derived from FFPE tissues and input guideline prior Next-Generation Sequencing (NGS) applications. The QC Plex assay enables the qualitative and quantitative assessment of human DNA. The assay is based on a multiplex PCR using a standard PCR protocol, followed by agarose gel-electrophoresis or a microfluidic-based method.

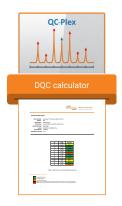
Overcoming the limitations of working with FFPE-derived DNA samples

Assessing the quality and quantity of FFPE-derived DNA can be a challenge before conducting any downstream PCR based NGS applications. Several factors contribute to the suboptimal performance of FFPE-derived DNA: (1) formalin fixation can lead to DNA crosslinking and DNA degradation; (2) presence of PCR inhibiting factors and (3) low DNA concentration. Measuring FFPE-derived DNA using spectrophotometric and/or fluorimetric methods provides information on the amount of DNA present but not on DNA integrity for which an extra measurement is required. However, often the amount of FFPE-derived DNA available is limited to perform further consecutive quality measurements to ensure reliable and reproducible assay results.

The QC Plex was developed to address the above issues. It is a simple, standardized, qualitative, multiplex PCR panel that can be used to determine the global FFPE-derived DNA quality prior to performing MASTR assays. The multiplex PCR generates 7 PCR fragments of different lengths of which 6 (100, 200, 300, 400, 600 and 700 bp) directly assess the DNA integrity and 1 DNA fragment (150 bp) serves as a positive PCR control fragment to control for the absence of PCR inhibitors. Data generated from the peak areas are used to calculate the DNA Quality Coefficient (DQC) value and DNA input requirement via the DQC Calculator (http://agilent.com).

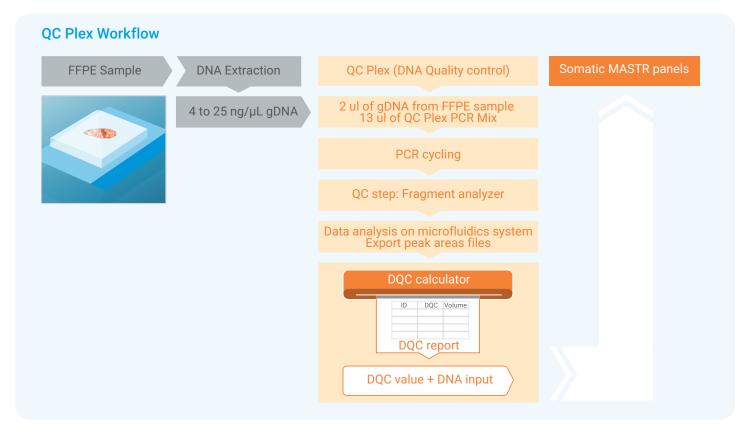


Added Values



Advantages	Specifications
Simple	Ready-to-use multiplex PCR assay with simple-to-follow protocol
Reliable	 Qualitative and quantitative assessment of FFPE-derived DNA One complete kit with all reagents included Positive PCR control fragment included to control for the absence PCR inhibitor
Rapid	~ 30 minutes hands-on protocol
Affordable	Cost effective assay determines sample suitability for downstream applications with somatic MASTR panels before committing time, money and resources

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Ordering Information

Cat. No.	Product Name	
QC-0521.100	QC Plex	

www.agilent.com

All regions but EU genomics@agilent.com

For Research Use Only. Not for use in diagnostic procedures.

This information is subject to change without notice.



