PlentiPlex™ Mastocytosis

Made by PentaBase

Detect down to one copy of KIT D816V in 100 ng DNA sample

The PlentiPlex™ Mastocytosis assay combines the high selectivity of SensiScreen® FFPE assays with the extreme sensitivity of SensiScreen® Liquid, enabling detection of single copy mutants in concentrated DNA samples.

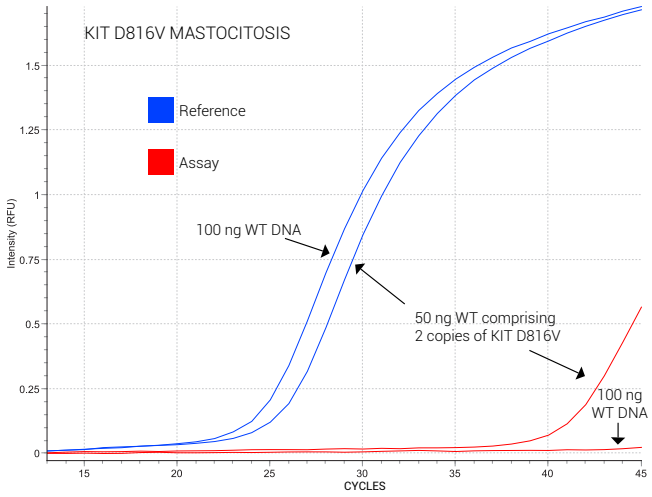
Mastocytosis is the common term for a heterogenous group of diseases characterized by abnormal accumulation and growth of neoplastic mast cells in tissue and organs.

KIT D816V mutation is almost always present in Mastocytosis patients and this somatic alteration is among the WHO criteria for diagnosis of mastocytosis.

PlentiPlex® Mastocytosis recognizes down to a single copy of mutated DNA in 100 ng WT DNA (LOD 0.003%)

PlentiPlex® Mastocytosis workflow

PlentiPlex™ Mastocytosis assay run on a MyGo Pro qPCR instrument. 100 ng WT DNA and 50 ng WT DNA spiked with 2 copies of KIT D816V mutant was analysed.



PlentiPlex® Mastocytosis offers a simple, efficient and sensitive analysis

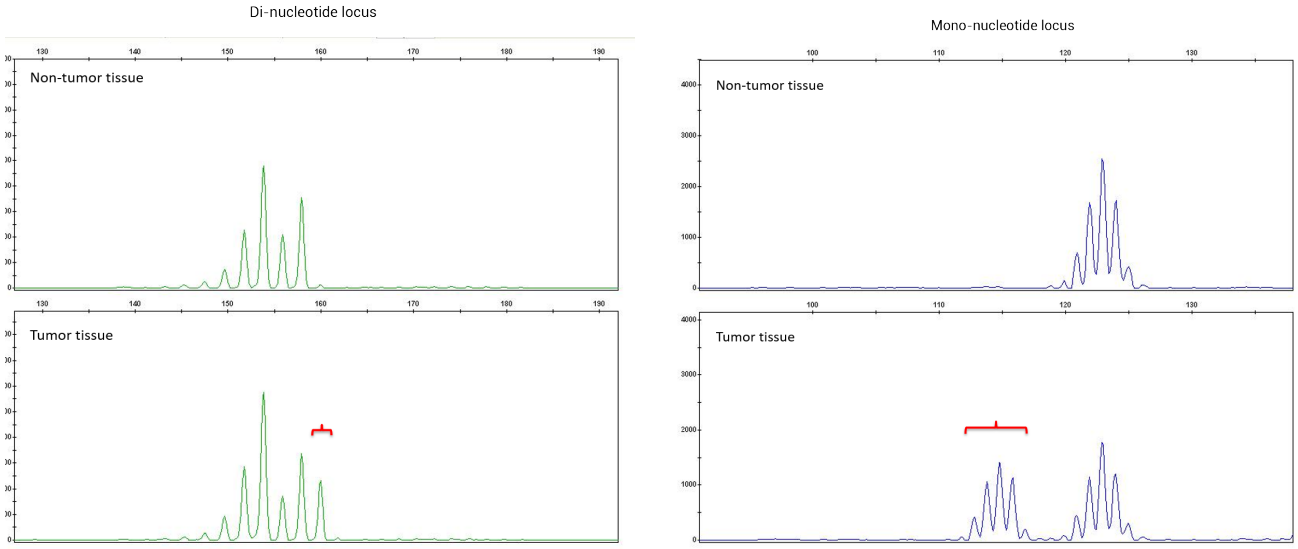
PlentiPlex™ MSI

Made by PentaBase

Five loci in one vial - three different Pentaplex panels

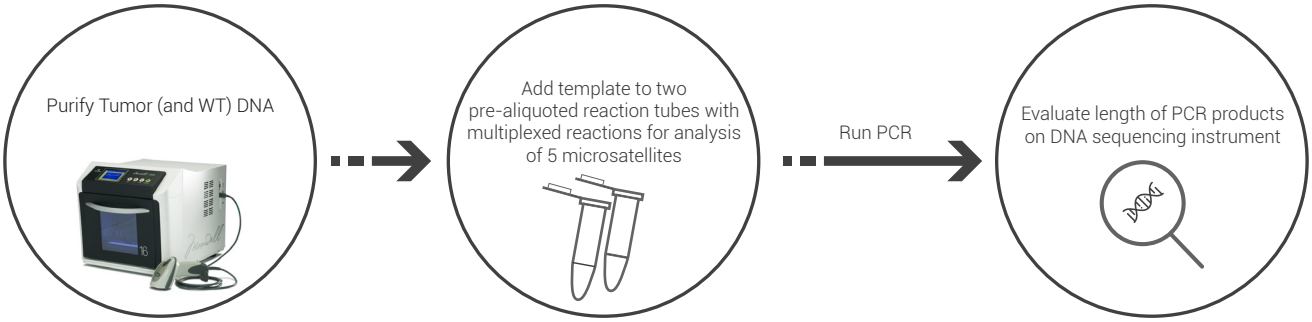
PlentiPlex™ MSI assays are intended for *in vitro* diagnosis of impaired DNA mismatch repair system (MMR) affecting prognosis and selection of treatment in cancer patients. PlentiPlex™ MSI assays offer three different multiplexed MSI assays for the length analysis of five microsatellite loci. The mono- and dinucleotide panel recommended by the Bethesda guidelines and two Pentaplex mononucleotide panels, enabling evaluation of MMR status on DNA sequencer instruments.

Microsatellites are genetic motifs consisting of short (one to six bases) nucleotide sequences repeated up to 100 times. During replication, these sequences are susceptible to errors, deletions and insertions, normally corrected by the DNA mismatch repair system. Uncorrected microsatellite errors are commonly referred to as microsatellite instability (MSI).



Two examples of microsatelitte instability samples. The tumor tissues (bottom) is compared to non-tumor tissues (top). Shown is capillary gel migration charts with MSI peaks marked with red brackets.

PlentiPlex™ MSI workflow



PlentiPlex™ MYD88

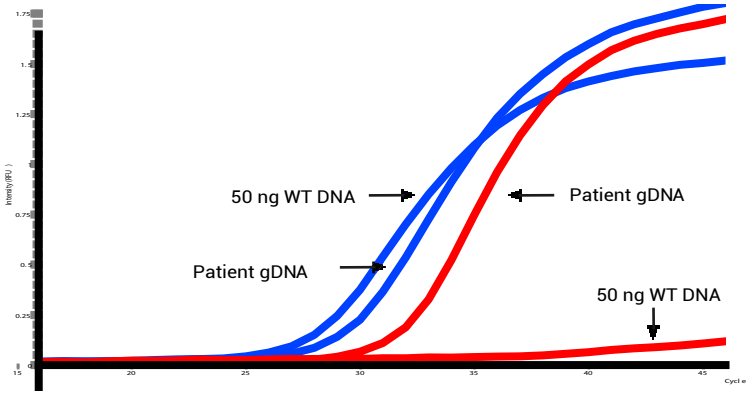
Made by PentaBase

Assist diagnosis of lymphomas

PlentiPlex™ MYD88 L265P assay is intended for *in vitro* diagnosis of the leucine to proline mutation in codon 265 of the Myeloid differentiation primary response 88 protein (MYD88 L265P) in genomic DNA (gDNA) samples. The obtained results of the PlentiPlex™ MYD88 L265P assay are intended for assisting in the discrimination between patients with Lymphoplasmacytic lymphoma/Waldenstrom macroglobulinemia (LPL/WM) and non-Hodgkin lymphoma.

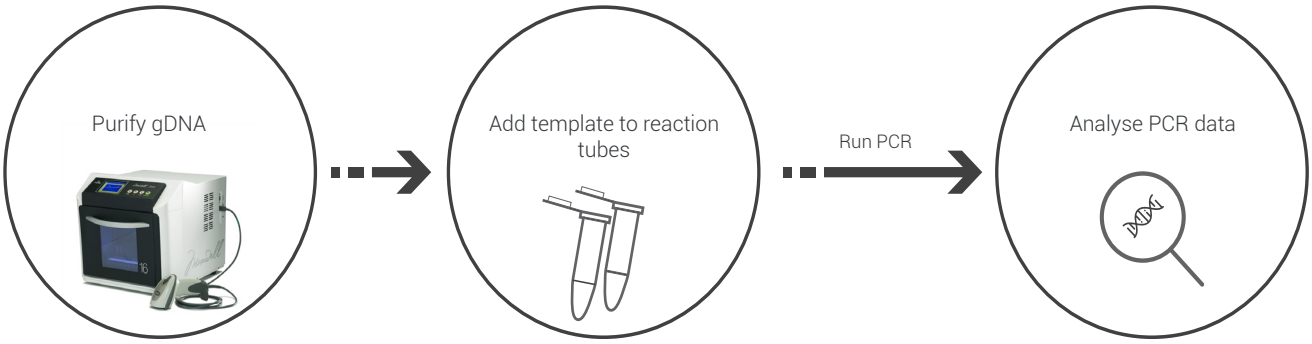
PlentiPlex™ MYD88 has a limit of detection of 0.25%

PlentiPlex™ MYD88 L265P assay combines high sensitivity with ease-of-use and is designed to work on standard real-time PCR equipment. The PlentiPlex™ MYD88 L265P assay is based on PentaBase's novel and selective INA® technologies including the use of BaseBlockers™ that suppress false positive signals from wild type (WT) templates.



PlentiPlex™ MYD88 L265P assay run on a MyGo Pro qPCR instrument. Two patient samples, one WT and one mutated, are shown. Blue lines represent reference assay and red lines represent mutant specific assay.

PlentiPlex® MYD88 workflow



More information at www.pentabase.com