



GenePath Dx JAK2 v2 Real Time qPCR Test Kit

For detection of the *JAK2* V617F mutation

The Janus Kinase 2 gene (*JAK2*) provides instructions to cells for making the JAK2 protein. This protein promotes cell growth and division and is especially important for controlling blood cell production within the bone marrow. A point mutation (V617F) in exon 14 of the *JAK2* gene is the most common somatic mutation in *BCR-ABL* negative myeloproliferative neoplasms, a group of closely related disorders in which the bone marrow produces too many of one or more types of blood cells.

Salient Features:

- Detection of the *JAK2* V617F mutation [*JAK2*:c.G1849T (p.V617F)] in genomic DNA extracted from either EDTA peripheral blood or bone marrow samples.
- The kit contains Standards that allow for the quantification of the *JAK2* V617F mutation which can be determined by calculating the % relative Mutant Allele Frequency (MAF).
- Wild type allele serves as an internal control, monitoring presence of PCR inhibitors in extracted DNA
- Single tube, two channel assay with broad instrument compatibility

Analytical sensitivity:

On the QIAGEN Rotor-Gene Q, this assay is capable of detecting down to **1% relative Mutant Allele Frequency** of the V617F mutation from 10ng of input DNA from clinical sample and synthetic plasmid.

Analytical specificity:

Laboratory (wet lab) and *in silico* (bioinformatic) analysis show that the test and its component assays are highly specific to *JAK2* V617F and demonstrate no cross-reactivity to or interference from human genomic DNA, other human transcripts or commonly encountered pathogens or commensals.

For more information, please contact kit.sales@genepathdx.com.

