

## TRUPCR®MPN Panel Kit

The TRUPCR® MPN Panel Kit is intended for the qualitative detection of JAK2-V617F, CALR, MPL W515K/L mutations and BCR ABL1 translocation in Myeloproliferative neoplasms (MPNs) in peripheral blood samples using real time PCR system.

Myeloproliferative neoplasms (MPN), previously called myeloproliferative disorders (MPD), are a group of diseases that are caused by an overproduction of one or more blood cell types (red cells, white cells or platelets) in the bone marrow. Myeloproliferative neoplasms (MPNs) are associated with dysregulation of tyrosine kinases, leading to abnormal downstream signaling pathways and increased cellular proliferation. Based on the presence or absence of the Philadelphia chromosome (BCR/ABL1translocation), MPN are broadly grouped into two categories - Philadelphia positive (chronic myeloid leukemia) and Philadelphia negative (polycythemia vera, essential thrombocythemia and myelofibrosis). The Philadelphia chromosome negative MPNs are characterized by mutations in various genes such as JAK2, MPL, CALR, PDGFRA, PDGFRB, FGFR1 and KIT. In addition, multiple chromosome abnormalities have been defined.

TRUPCR® MPN panel Kit is a Real time PCR assay which is based on fluorescent signal generated from the presence of an oligonucleotide probe specific for target DNA sequence. TRUPCR®MPN Panel kit is a comprehensive kit which includes complete cDNA chemistry for RNA based transcripts.

**BCR-ABL1**

**JAK2-V617F**

**CALR Type 1/2**

**MPL W515K/L**

### Key features:

- TRUPCR® MPN Panel Kit allows comprehensive detection of most common diagnostic and prognostic markers for Myeloproliferative neoplasms (MPN)
- It detects most common variants of transcripts in the fusion gene and most common mutations in prognostics markers
- The kit offers sensitivity to detect up to 10 copies of fusion transcripts BCR-ABL1 and up to 1% mutant allele in background of 99% wild type allele for JAK 2, CALR and MPL genes.
- All the reagents for cDNA chemistry, PCR and real-time PCR are included in the kit
- It is compatible with various Real Time& Conventional PCR instruments
- Easy-to-use, rapid, reliable, comprehensive and cost-effective tests

### Mutation Variants detected by TRUPCR® MPN Panel Kit

No.	Gene	Variant
1	BCR-ABL1	e13a2 & e14a2 (p210) e1a2 (p190)
2	JAK 2	V617F
3	CALR	Type 1 and Type 2
4	MPL	W515L and W515K
5	ABL1	Control gene

### Ordering information:

Cat. No.	Product	Contents
3B1305	TRUPCR® MPN Panel Kit	48Rxn
3B1306	TRUPCR® MPN Panel Kit	96Rxn

TRUPCR® is a registered trademark of 3B BlackBio Biotech India Ltd.

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