

## PRODUCT DATA SHEET

Bioworld Technology CO., Ltd.



### MLH3 (R546) Peptide

Cat No.: BS2762P

#### Background

DNA mismatch repair (MMR) is essential for maintaining the integrity of the genome during replication. This process is highly conserved across bacterial and eukaryotic systems, as many of the genes expressed in bacteria are closely related to the yeast and mammalian homologs. In bacteria two proteins, MutS and MutL, form homodimeric complexes that are responsible for recognizing and facilitating MMR. Human homologs of these proteins include MSH2 and MSH3 (MutS homolog 2 and 3), and the corresponding human homologs of MutL are MLH1, PMS1, PMS2 and MLH3. MSH2 and MSH3 form heterodimers that cooperatively mediate MMR. MLH3 preferentially dimerizes with MLH1 to repair DNA mismatches and restore the stability to the genome. Mutations in the genes encoding MSH2 and MLH1 induce microsatellite instability of the DNA. These mutations are associated with the occurrence of hereditary nonpolyposis colorectal cancer (HNPCC) and are a common feature in the progression of many other cancers.

#### Swiss-Prot

Q9UHC1

#### Applications

Blocking

#### Specificity

This peptide can be used with studies using BS2762 MLH3 (R546) pAb.

#### Purification & Purity

Synthetic peptide MLH3 (R546). (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### Product

1 mg/ml in DI water.

#### Storage & Stability

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

#### Research Use

For research use only, not for use in diagnostic procedure.