

**MPP8 Antibody (N-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP5718a****Specification**

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**MPP8 Antibody (N-term) Blocking peptide - Product Information**

Primary Accession [O99549](#)  
Other Accession [NP\\_059990.2](#)

**MPP8 Antibody (N-term) Blocking peptide - Additional Information**

**Gene ID** 54737

**Other Names**

M-phase phosphoprotein 8, Two hybrid-associated protein 3 with RanBPM, Twa3, MPHOSPH8, MPP8

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**MPP8 Antibody (N-term) Blocking peptide - Protein Information**

**Name** MPHOSPH8 ([HGNC:29810](#))

**Synonyms** MPP8

**Function**

Heterochromatin component that specifically recognizes and binds methylated 'Lys-9' of histone H3 (H3K9me) and promotes recruitment of proteins that mediate epigenetic repression (PubMed: [20871592](http://www.uniprot.org/citations/20871592), PubMed: [26022416](http://www.uniprot.org/citations/26022416)). Mediates recruitment of the HUSH complex to H3K9me3 sites: the HUSH complex is recruited to genomic loci rich in H3K9me3 and is required to maintain transcriptional silencing by promoting recruitment of SETDB1, a histone methyltransferase that mediates further deposition of H3K9me3, as well as MORC2 (PubMed: [26022416](http://www.uniprot.org/citations/26022416), PubMed: [28581500](http://www.uniprot.org/citations/28581500)). Binds H3K9me and promotes DNA methylation by recruiting DNMT3A to target CpG sites; these can be situated within the coding region of the gene (PubMed: [20871592](http://www.uniprot.org/citations/20871592)). Mediates down-regulation of CDH1 expression (PubMed: [20871592](http://www.uniprot.org/citations/20871592)). Also represses L1 retrotransposons in collaboration with MORC2 and, probably, SETDB1, the silencing is

dependent of repressive epigenetic modifications, such as H3K9me3 mark. Silencing events often occur within introns of transcriptionally active genes, and lead to the down-regulation of host gene expression (PubMed:[29211708](http://www.uniprot.org/citations/29211708)). The HUSH complex is also involved in the silencing of unintegrated retroviral DNA by being recruited by ZNF638: some part of the retroviral DNA formed immediately after infection remains unintegrated in the host genome and is transcriptionally repressed (PubMed:[30487602](http://www.uniprot.org/citations/30487602)).

#### **Cellular Location**

Nucleus. Chromosome. Note=Detected on heterochromatin (PubMed:20871592, PubMed:26022416). Dissociates from chromatin during interphase and early mitosis (PubMed:23416073). Detected on nucleosomes (PubMed:20871592).

#### **MPP8 Antibody (N-term) Blocking peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

#### **MPP8 Antibody (N-term) Blocking peptide - Images**

#### **MPP8 Antibody (N-term) Blocking peptide - References**

Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006) Maksimov, V.V., et al. Genetika 42(2):274-277(2006) Dunham, A., et al. Nature 428(6982):522-528(2004)