

MBTD1 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP11372b**Specification**

MBTD1 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q05BQ5](#)**MBTD1 Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 54799

Other Names

MBT domain-containing protein 1, MBTD1

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.

MBTD1 Antibody (C-term) Blocking peptide - Protein Information**Name** MBTD1 {ECO:0000303|PubMed:23915195, ECO:0000312|HGNC:HGNC:19866}**Function**

Chromatin reader component of the NuA4 histone acetyltransferase complex, a multiprotein complex involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A (PubMed:27153538, PubMed:32209463). The NuA4 complex plays a direct role in repair of DNA double-strand breaks (DSBs) by promoting homologous recombination (HR) (PubMed:27153538). MBTD1 specifically recognizes and binds monomethylated and dimethylated 'Lys-20' on histone H4 (H4K20me1 and H4K20me2, respectively) (PubMed:19841675, PubMed:27153538, PubMed:32209463). In the NuA4 complex, MBTD1 promotes recruitment of the complex to H4K20me marks by competing with TP53BP1 for binding to H4K20me (PubMed:27153538). Following recruitment to H4K20me at DNA breaks, the NuA4 complex catalyzes acetylation of 'Lys-15' on histone H2A (H2AK15), blocking the ubiquitination mark required for TP53BP1 localization at DNA breaks, thereby promoting homologous recombination (HR) (PubMed:27153538).

target="_blank">27153538).

Cellular Location

Nucleus. Chromosome

MBTD1 Antibody (C-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MBTD1 Antibody (C-term) Blocking peptide - Images**MBTD1 Antibody (C-term) Blocking peptide - Background**

Putative Polycomb group (PcG) protein. PcG proteins maintain the transcriptionally repressive state of genes, probably via a modification of chromatin, rendering it heritably changed in its expressibility (By similarity). Specifically binds to monomethylated and dimethylated 'Lys-20' on histone H4.

MBTD1 Antibody (C-term) Blocking peptide - References

Eryilmaz, J., et al. PLoS ONE 4 (10), E7274 (2009) :