

Mbtd1 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI13197

Product Information

Application	WB
Primary Accession	Q6P5G3
Other Accession	NM_134012 , NP_598773
Reactivity	Human, Mouse, Rat, Rabbit, Pig, Dog, Guinea Pig, Horse, Bovine
Predicted	Human, Mouse, Rabbit, Pig, Chicken, Dog, Horse, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	70669

Additional Information

Gene ID	103537
Alias Symbol Other Names	AA408199, AI194990, hemp MBT domain-containing protein 1, Mbtd1
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Mbtd1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Mbtd1 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Mbtd1 {ECO:0000312 MGI:MGI:2143977}
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. The NuA4 complex plays a direct role in repair of DNA double-strand breaks (DSBs) by promoting homologous recombination (HR). MBTD1 specifically recognizes and binds monomethylated and dimethylated 'Lys-20' on histone H4 (H4K20me1 and H4K20me2, respectively). In the NuA4 complex, MBTD1 promotes recruitment of the complex to H4K20me marks by competing with TP53BP1 for binding to H4K20me. 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).

Cellular Location

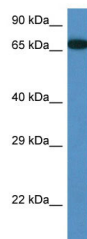
Nucleus {ECO:0000250|UniProtKB:Q05BQ5}. Chromosome {ECO:0000250|UniProtKB:Q05BQ5}

References

Church D.M.,et al.PLoS Biol. 7:E1000112-E1000112(2009).

Park J.,et al.Mol. Cell 50:919-930(2013).

Images



WB Suggested Anti-Mbtd1 Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Pancreas

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.