

**Tip60 Antibody**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Transfected Only	60	Rabbit	#Q92993	10524

**Product Usage Information****Application**

Western Blotting

**Dilution**

1:1000

**Storage**

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

**Specificity/Sensitivity**

Tip60 Antibody recognizes transfected levels of total Tip60 protein.

**Species predicted to react based on 100% sequence homology**

Mouse, Monkey, Bovine, Horse, Guinea Pig

**Source / Purification**

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding His60 of human Tip60 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**

Tip60 is a member of the MYST (MOZ, YBF2, SAS2 and Tip60) family of histone acetyltransferases and plays a role in a variety of cellular processes such as transcriptional regulation, DNA repair, and apoptosis (1,2). Tip60 exists as part of a multi-subunit complex that includes proteins such as TRRAP, p400, Reptin, and Pontin (3,4). Tip60 plays important roles in double-stranded DNA break (DSB) repair. Tip60 is required for the activation of the ATM kinase in response to DSBs, as well as acetylation of histones H4 and H2A.X at DSBs to facilitate DNA repair (1,2,5-7). In addition, Tip60 dependent acetylation at Lys120 of p53 within the DNA binding domain is required for the induction of apoptosis upon DNA damage (8,9). Tip60 is involved in a number of transcriptional regulation pathways driven by factors such as nuclear receptors and  $\beta$ -catenin (10-13). The Tip60 complex has been shown to be important for mouse embryonic stem cell self-renewal by regulating transcription of developmental regulators that are controlled by Nanog (14). GSK3 (glycogen synthase kinase-3) mediated phosphorylation at Ser86 of Tip60 promotes Tip60 acetylation and subsequent stimulation of the required autophagy protein ULK1 (15).

**Background References**

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**Species Reactivity**

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

**Western Blot Buffer**

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBST, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

**Applications Key**

**W:** Western Blotting

**Cross-Reactivity Key**

H: Human

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