10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MIB1 Antibody

Catalog # ASC11794

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q86YT6
Other Accession	NP_065825, 30348954
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	110136
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	MIB1 antibody can be used for detection of MIB1 by Western blot at 1 - 2 g/ml. Antibody can also be used for Immunocytochemistry at 5 g/mL. For Immunoflorescence start at 20 g/mL.

Additional Information

Gene ID	57534
Other Names	E3 ubiquitin-protein ligase MIB1, 6.3.2.-, DAPK-interacting protein 1, DIP-1, Mind bomb homolog 1, Zinc finger ZZ type with ankyrin repeat domain protein 2, MIB1, DIP1, KIAA1323, ZZANK2
Target/Specificity	MIB1; MIB1 antibody is human, mouse and rat reactive. At least three isoforms of MIB1 are known to exist.
Reconstitution & Storage	MIB1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.
Precautions	MIB1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MIB1
Synonyms	DIP1, KIAA1323, ZZANK2
Function	E3 ubiquitin-protein ligase that mediates ubiquitination of Delta receptors, which act as ligands of Notch proteins. Positively regulates the Delta-mediated Notch signaling by ubiquitinating the intracellular domain of Delta, leading to endocytosis of Delta receptors. Probably mediates ubiquitination and subsequent proteasomal degradation of DAPK1, thereby antagonizing anti-apoptotic effects of DAPK1 to promote TNF-induced apoptosis (By similarity). Involved in ubiquitination of centriolar satellite

	CEP131, CEP290 and PCM1 proteins and hence inhibits primary cilium formation in proliferating cells. Mediates 'Lys-63'-linked polyubiquitination of TBK1, which probably participates in kinase activation.
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriolar satellite. Cell membrane. Note=Localizes to the plasma membrane (By similarity) According to PubMed:15048887, it is mitochondrial, however such localization remains unclear. Displaced from centriolar satellites in response to cellular stress, such as ultraviolet light (UV) radiation or heat shock.
Tissue Location	Widely expressed at low level. Expressed at higher level in spinal cord, ovary, whole brain, and all specific brain regions examined.

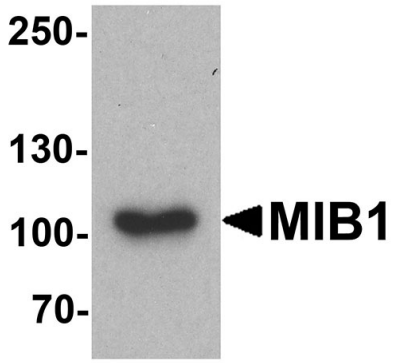
Background

The E3 ubiquitin-protein ligase MIB1, also known as Mindbomb homolog 1, contains multiple ankyrin repeats and RING finger domains that functions as an E3 ubiquitin ligase (1). MIB1 interacts with and regulates the cellular expression of the death-associated protein kinase 1 (DAPK1) protein by promoting its ubiquitination and degradation (1). It also positively regulates Notch signaling by ubiquitinating the Notch receptors, thereby facilitating their endocytosis (2).

References

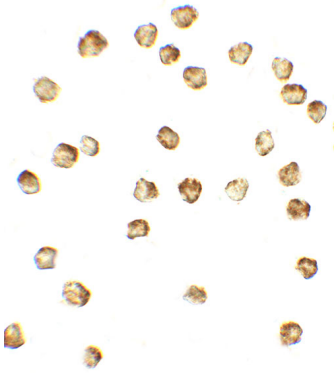
Jin Y, Blue EK, Dixon S, et al. A death-associated protein kinase (DAPK)-interacting protein, DIP-1, is an E3 ubiquitin ligase that promotes tumor necrosis factor-induced apoptosis and regulates the cellular level of DAPK. J. Biol. Chem. 2002; 277:46980-6.
Hansson EM, Lanner F, Das D, et al. Control of Notch0ligand endocytosis by ligand-receptor interaction. J. Cell Sci. 2010; 123:2931-42.

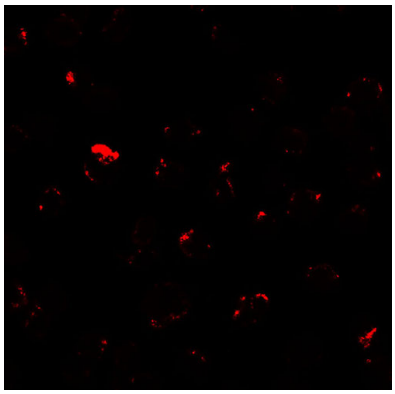
Images



Western blot analysis of MIB1 in A431 cell lysate with MIB1 antibody at 1 µg/ml.

Immunocytochemistry of MIB1 in A431 cells with MIB1 antibody at 5 µg/mL.





Immunofluorescence of MIB1 in A431 cells with MIB1 antibody at 20 µg/mL.

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