

**Mib1/Mindbomb Antibody (N-term)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2172a****Specification**

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**Mib1/Mindbomb Antibody (N-term) - Product Information**

Application	WB, IHC-P, IF,E
Primary Accession	<a href="#">Q86YT6</a>
Other Accession	<a href="#">Q6GNY1</a> , <a href="#">Q80SY4</a> , <a href="#">Q804S5</a>
Reactivity	Human
Predicted	Zebrafish, Mouse, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	110136
Antigen Region	13-42

**Mib1/Mindbomb Antibody (N-term) - Additional Information****Gene ID** 57534**Other Names**

E3 ubiquitin-protein ligase MIB1, 632-, 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**

This Mib1/Mindbomb antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 13-42 amino acids from the N-terminal region of human Mib1/Mindbomb.

**Dilution**

WB~~1:1000  
IHC-P~~1:50~100  
IF~~1:20~100  
E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Mib1/Mindbomb Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**Mib1/Mindbomb Antibody (N-term) - 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.

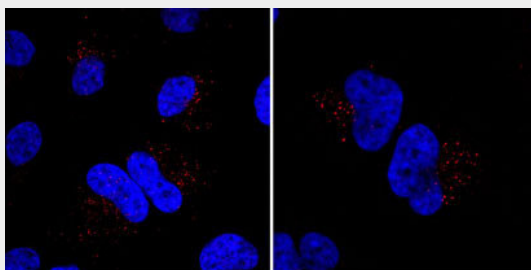
**Tissue Location**

Widely expressed at low level. Expressed at higher level in spinal cord, ovary, whole brain, and all specific brain regions examined.

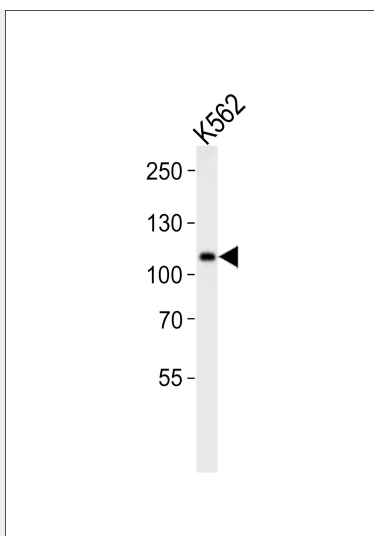
**Mib1/Mindbomb Antibody (N-term) - Protocols**

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

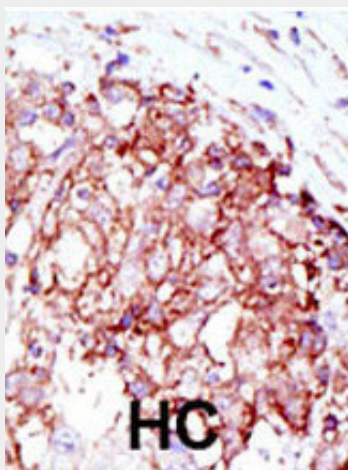
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Mib1/Mindbomb Antibody (N-term) - Images**

Immunofluorescent staining of HeLa cells incubated with MIB Antibody (N-term) (Cat # AP2172a) at a dilution of 1:20. Data courtesy of Dr. Vyacheslav Akimov, University of Southern Denmark.



MIB Antibody (K28) (Cat. #AP2172a) western blot analysis in K562 cell line lysates (35ug/lane). This demonstrates the MIB antibody detected the MIB protein (arrow).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

#### **Mib1/Mindbomb Antibody (N-term) - Background**

MIB is an E3 ubiquitin-protein ligase that mediates ubiquitination of Delta receptors, which act as ligands of Notch proteins. This protein positively regulates the Delta-mediated Notch signaling by ubiquitinating the intracellular domain of Delta, leading to endocytosis of Delta receptors. MIB probably mediates ubiquitination and subsequent proteasomal degradation of DAPK1, thereby antagonizing anti-apoptotic effects of DAPK1 to promote TNF-induced apoptosis.

#### **Mib1/Mindbomb Antibody (N-term) - References**

Itoh, M., et al., Dev. Cell 4(1):67-82 (2003).  
Jin, Y., et al., J. Biol. Chem. 277(49):46980-46986 (2002).