

# MED28 Antibody

Catalog # ASC10737

#### Specification

# MED28 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC <u>O9H204</u> NP\_079481, 52851391 Human, Mouse Rabbit Polyclonal IgG MED28 antibody can be used for detection of MED28 by Western blot at 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μg/mL. For immunofluorescence start at 20 μg/mL.

# MED28 Antibody - Additional Information

Gene ID Target/Specificity MED28;

#### **Reconstitution & Storage**

MED28 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

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#### Precautions

MED28 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **MED28 Antibody - Protein Information**

Name MED28

Synonyms EG1

#### Function

Component of the Mediator complex, a coactivator involved in the regulated transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene- specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by direct interactions with regulatory proteins and serves as a scaffold for the assembly of a functional preinitiation complex with RNA polymerase II and the general transcription factors. May be part of a complex containing NF2/merlin that participates in cellular signaling to the actin cytoskeleton downstream of tyrosine kinase signaling pathways.



**Cellular Location** 

Nucleus. Cytoplasm. Membrane; Peripheral membrane protein Note=According to PubMed:15467741, it is cytoplasmic and mainly membrane-associated

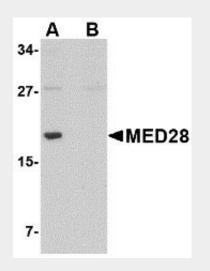
**Tissue Location** Widely expressed. Highly expressed in vascular tissues such as placenta, testis and liver

# MED28 Antibody - Protocols

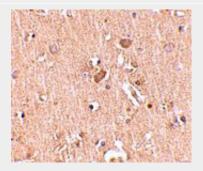
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# MED28 Antibody - Images



Western blot analysis of MED28 in human brain tissue lysate with MED28 antibody at 1  $\mu$ g/mL in (A) the absence and (B) the presence of blocking peptide.



Immunohistochemistry of MED28 in human brain tissue with MED28 antibody at 2.5 μg/mL. MED28 Antibody - Background



MED28 Antibody: The mediator complex is a multi-protein transcriptional co-activator that is expressed ubiquitously in eukaryotes from yeast to mammals and is required for induction of RNA polymerase II (pol II) transcription by DNA binding transcription factor. One of the proteins in this complex is MED28, also known as Magicin. MED28 is expressed in many cell lines and tissues. It has been shown that a down-regulation of MED28 expression in NIH3T3 cells results in a significant induction of several genes associated with smooth muscle cell differentiation and conversely its over-expression represses expression of SMC genes. MED28 can also form a ternary complex with Grb2 and Merlin, the neurofibromatosis 2 tumor suppressor protein, indicating that MED28 may play a role in Merlin's tumor suppressive activity. MED28 has also been recently identified as an HIV dependency factor (HDF), suggesting that MED28 may be an important drug target in HIV treatment. At least two isoforms of MED28 are known to exist.

#### MED28 Antibody - References

Sato S, Tomomori-Sato C, Parmely TJ, et al. A set of consensus mammalian mediator subunits identified by multidimensional protein identification technology. Mol. Cell2004; 14:685-91. Beyer KS, Beauchamp RL, Lee MF, et al. Mediator subunit MED28 (Magicin) is a repressor of smooth muscle cell differentiation. J. Biol. Chem.2007; 282:32152-7.

Wiederhold T, Lee MF, James M, et al. Magicin, a novel cytoskeletal protein associates with the NF2 tumor suppressor merlin and Grb2. Oncogene2004; 23:8815-25.

Brass AL, Dykxhoorn DM, Benita Y, et al. Identification of host proteins required for HIV infection through a functional genomic screen. Science2008; 319:921-6.