

#### **PID Antibody**

Catalog # ASC10138

# **Specification**

# **PID Antibody - Product Information**

Application WB, IF, ICC, E
Primary Accession 094776

Other Accession
Reactivity
Host
Clonality

AAG02241, 9931638
Human, Mouse, Rat
Rabbit
Polyclonal

lsotype IgG

Calculated MW Predicted: 73 kDa

Observed: 75 kDa KDa

Application Notes

PID antibody can be used for detection of PID by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry

starting at 10 μg/mL. For

immunofluorescence start at 10 μg/mL.

# **PID Antibody - Additional Information**

Gene ID 9219

Other Names

PID Antibody: PID, MTA1L1, PID, Metastasis-associated protein MTA2, Metastasis-associated 1-like 1, MTA1-L1 protein, metastasis associated 1 family, member 2

## Target/Specificity

MTA2; PID antibody is predicted to not cross-react with MTA2

# **Reconstitution & Storage**

PID 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.

### **Precautions**

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

# **PID Antibody - Protein Information**

Name MTA2

Synonyms MTA1L1, PID

### **Function**

May function as a transcriptional coregulator (PubMed:<a href="http://www.uniprot.org/citations/16428440" target="\_blank">16428440</a>, PubMed:<a





href="http://www.uniprot.org/citations/28977666" target="\_blank">28977666</a>). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:<a href="http://www.uniprot.org/citations/16428440" target="\_blank">16428440</a>, PubMed:<a href="http://www.uniprot.org/citations/28977666" target="\_blank">28977666</a>).

#### **Cellular Location**

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00512, ECO:0000255|PROSITE-ProRule:PRU00624, ECO:0000269|PubMed:28977666, ECO:0000269|PubMed:33283408}

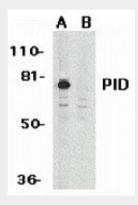
**Tissue Location** Widely expressed.

# **PID Antibody - Protocols**

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

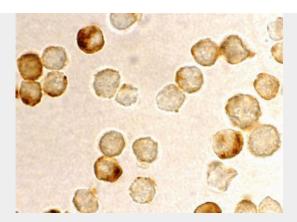
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **PID Antibody - Images**

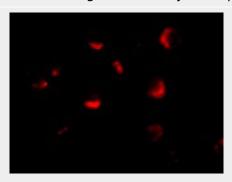


Western blot analysis of PID expression in HeLa whole cell lysates in the absence (A) or presence (B) of blocking peptide with PID antibody at 1  $\mu$ g/mL.





Immunocytochemistry staining of HeLa using PID antibody at 10 µg/mL.



Immunofluorescence of PID in HeLa cells with PID antibody at 10 ug/mL.

# **PID Antibody - Background**

PID Antibody: The p53 tumor-suppressor gene integrates numerous signals that control cell life and death. Several novel molecules involved in p53 pathway, including Chk2, p53R2, p53AlP1, Noxa, PIDD, and PID/MTA2, were recently discovered. The transcriptional activity of p53 is modulated by protein stability and acetylation. PID/MTA2, also termed MTA1-L1, was found to be a subunit of nucleosome remodeling and deacetylating (NRD/NuRD) complex. PID/MTA2 modulates the enzymatic activity of the histone deacetylase complex and its expression reduces the levels of acetylated p53. Deacetylation of p53 by PID/MTA2 represses p53-dependent transcriptional activation and modulates p53-mediated cell growth arrest and apoptosis. PID/MTA2 is ubiquitously expressed in human tissues.

# **PID Antibody - References**

Matsuoka S, Huang M, and Elledge SJ. Linkage of ATM to cell cycle regulation by the Chk2 protein kinase. Science 1998; 282:1893-7.

Tanaka H, Arakawa H, Yamaguchi T, et al. A ribonucleotide reductase gene involved in a p53-dependent cell-cycle checkpoint for DNA damage. Nature 2000; 404:42-9.

Oda E, Ohki R, Murasawa H, et al. Noxa, a BH3-only member of the Bcl-2 family and candidate mediator of p53-induced apoptosis. Science 2000; 288:1053-8.

Oda K, Arakawa H, Tanaka T, et al. p53AlP1, a potential mediator of p53-dependent apoptosis, and its regulation by Ser-46-phosphorylated p53. Cell 2000;102:849-62.