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PID Antibody

Catalog # ASC10138

Product Information

Application	WB, IF, ICC, E
Primary Accession	O94776
Other Accession	AAG02241, 9931638
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	75023
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	PID antibody can be used for detection of PID by Western blot at 1 □g/mL. Antibody can also be used for immunocytochemistry starting at 10 □g/mL. For immunofluorescence start at 10 □g/mL.

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℃ for three months and -20℃, 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.

Protein Information

Name	MTA2
Synonyms	MTA1L1, PID
Function	May function as a transcriptional coregulator (PubMed: 16428440, PubMed:28977666). Acts as a component of the histone deacetylase NuRD complex which participates in the remodeling of chromatin (PubMed:16428440, PubMed:28977666).
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.

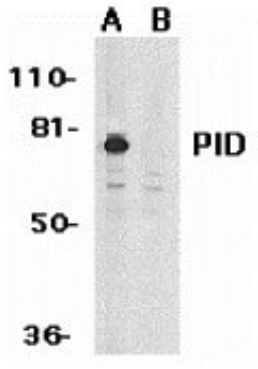
Background

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, p53AIP1, 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.

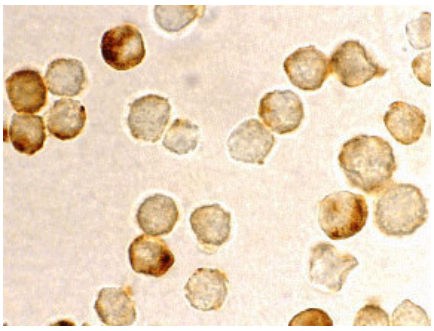
References

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. p53AIP1, a potential mediator of p53-dependent apoptosis, and its regulation by Ser-46-phosphorylated p53. Cell 2000;102:849-62.

Images

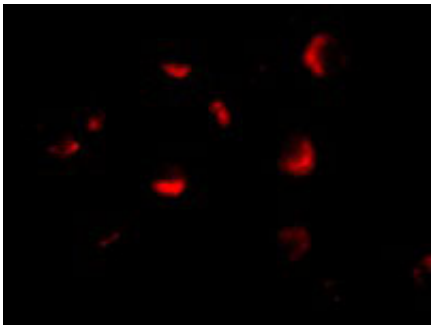


Western blot analysis of PID expression in HeLa whole cell lysates in the absence (A) or presence (B) of blocking peptide with PID antibody at 1 µg/mL.



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

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



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