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# PID Antibody

Catalog # ASC10138

## Product Information

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|---|---|
| **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

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|---|---|
| **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

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|---|---|
| **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.

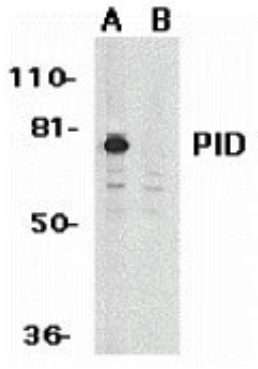
## Background

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.

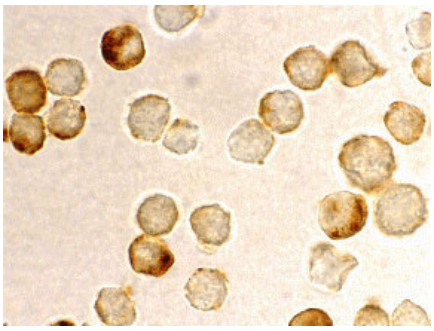
## References

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

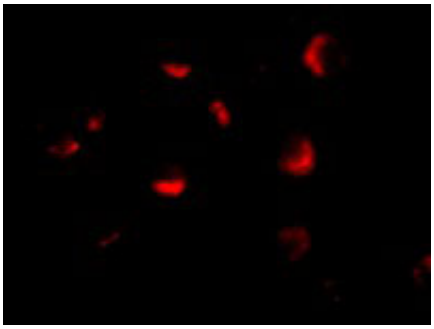



Western blot analysis of PID expression in HeLa whole cell lysates in the absence (A) or presence (B) of blocking peptide with PID antibody at 1 µg/mL.



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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