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# DAP Antibody

Catalog # ASC11669

## Product Information

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| **Application** | WB, IF, E, IHC-P |
| **Primary Accession** | P51397 |
| **Other Accession** | NP_004385, 4758120 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 11165 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | DAP antibody can be used for detection of DAP by Western blot at 1 - 2 g/mL. |

## Additional Information

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| **Gene ID** | 1611 |
| **Other Names** | Death-associated protein 1, DAP-1, DAP, DAP1 |
| **Target/Specificity** | DAP; DAP antibody is human, mouse and rat reactive. |
| **Reconstitution & Storage** | DAP antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. |
| **Precautions** | DAP Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | DAP ( HGNC:2672) |
| **Function** | Ribosome-binding protein involved in ribosome hibernation, a process during which ribosomes are stabilized in an inactive state and preserved from proteasomal degradation (By similarity). Acts via its association with eiF5a (EIF5A and EIF5A2) at the polypeptide exit tunnel of the ribosome, preventing mRNA translation (By similarity). Involved in ribosome hibernation in the mature oocyte by preventing mRNA translation, leading to ribosome inactivation (By similarity). Ribosomes, which are produced in large quantities during oogenesis, are stored and translationally repressed in the oocyte and early embryo (By similarity). Also acts as a negative regulator of autophagy (PubMed:20537536). Involved in mediating interferon-gamma-induced cell death (PubMed:7828849). |

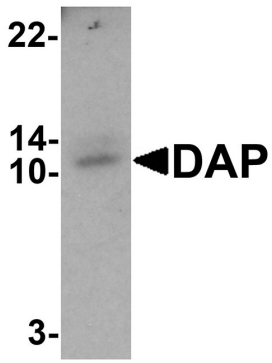
## Background

DAP Antibody: The Death-associated protein (DAP) is a basic proline-rich 15kDa protein that as a positive mediator of programmed cell death that is induced by interferon-gamma (1). DAP is also a direct substrate of mammalian target of rapamycin (mTOR), a serine/threonine kinase that regulates cell growth and cell cycle, and a negative regulator of autophagy. Under rich nutrient conditions, mTOR phosphorylates DAP at Ser3 and Ser51; under starvation conditions, these residues are dephosphorylated and DAP is converted into an active suppressor of autophagy (2).

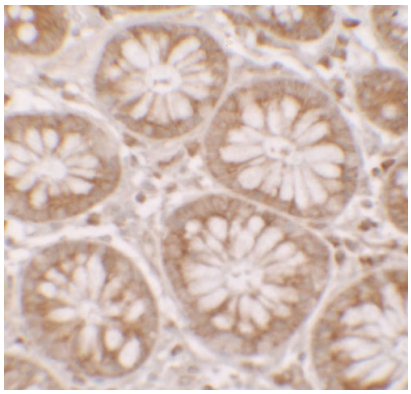
## References

Deiss LP, Feinstein E, Berissi H, et al. Identification of a novel serine/threonine kinase and a novel 15-kD protein as potential mediators of the gamma interferon-induced cell death. Genes Dev. 1995; 9:15-30.
Koren I, Reem E, and Kimchi A. DAP1, a novel substrate of mTOR, negatively regulates autophagy. Curr. Biol. 2010; 20:1093-8.

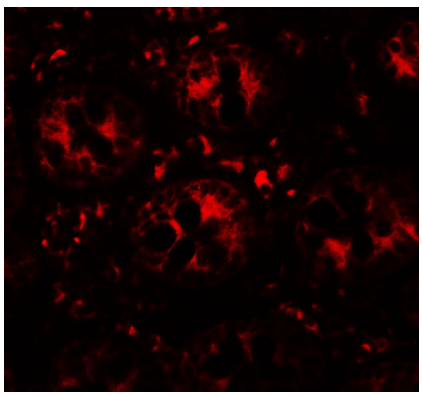
## Images




Western blot analysis of DAP in human small intestine tissue lysate with DAP antibody at 1 µg/mL.



Immunohistochemistry of DAP in human small intestine tissue with DAP antibody at 5 µg/ml.



Immunofluorescence of DAP in human small intestine tissue with DAP antibody at 20 µg/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.