

DAP Antibody

Catalog # ASC11669

Specification

DAP Antibody - Product Information

Application WB, IHC-P, IF, E

Primary Accession P51397

Other Accession
Reactivity
Human, Mouse, Rat
Rabbit

Clonality Polyclonal Isotype IgG

Calculated MW Predicted: 11 kDa

Observed: 11 kDa KDa

Application Notes DAP antibody can be used for detection of

DAP by Western blot at 1 - 2 μg/mL.

DAP Antibody - Additional Information

Gene ID **1611**

Target/Specificity

DAP; DAP antibody is human, mouse and rat reactive.

Reconstitution & Storage

DAP antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

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

DAP Antibody - Protein Information

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).

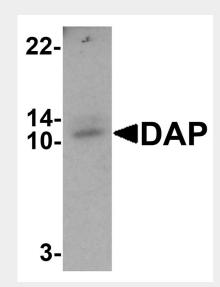


DAP Antibody - Protocols

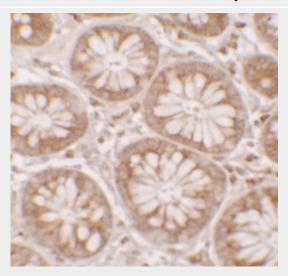
Provided below are standard protocols that you may find useful for product applications.

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

DAP Antibody - Images

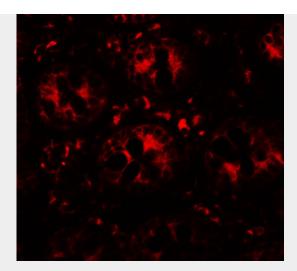


Western blot analysis of DAP in human small intestine tissue lysate with DAP antibody at 1 µg/mL.



Immunohistochemistry of DAP in human small intestine tissue with DAP antibody at 5 $\mu g/ml$.





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

DAP Antibody - 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).

DAP Antibody - 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.