

**Goat Anti-DAP3 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1300a****Specification**

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**Goat Anti-DAP3 Antibody - Product Information**

Application	WB, ICC, E
Primary Accession	<a href="#">P51398</a>
Other Accession	<a href="#">NP_004623</a> , <a href="#">7818</a>
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	45566

**Goat Anti-DAP3 Antibody - Additional Information****Gene ID** 7818**Other Names**

28S ribosomal protein S29, mitochondrial, MRP-S29, S29mt, Death-associated protein 3, DAP-3, Ionizing radiation resistance conferring protein, DAP3, MRPS29

**Dilution**

WB~~1:1000

ICC~~N/A

E~~N/A

**Format**

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Goat Anti-DAP3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-DAP3 Antibody - Protein Information****Name** DAP3 {ECO:0000303|PubMed:15489334}**Function**

As a component of the mitochondrial small ribosomal subunit, it plays a role in the translation of

mitochondrial mRNAs (PubMed:<a href="http://www.uniprot.org/citations/39701103" target="\_blank">39701103</a>). Involved in mediating interferon-gamma-induced cell death (PubMed:<a href="http://www.uniprot.org/citations/7499268" target="\_blank">7499268</a>). Displays GTPase activity in vitro (PubMed:<a href="http://www.uniprot.org/citations/39701103" target="\_blank">39701103</a>).

#### Cellular Location

Mitochondrion

#### Tissue Location

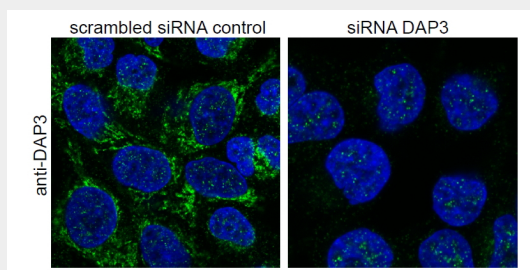
Ubiquitous.

### Goat Anti-DAP3 Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Goat Anti-DAP3 Antibody - Images

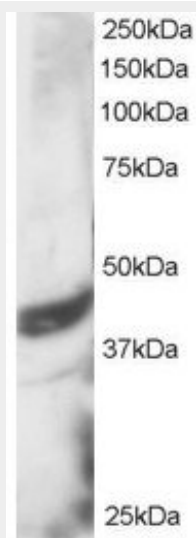


AF1300a (0.5ug/ml) staining of guanidinium thiocyanate-treated HeLa before (left) and after (right) si-RNA-mediated DAP3 knock-down expression. Primary incubation 1h at ambient temp. Detection by DyLight 488. Nuclear DAPI stain.

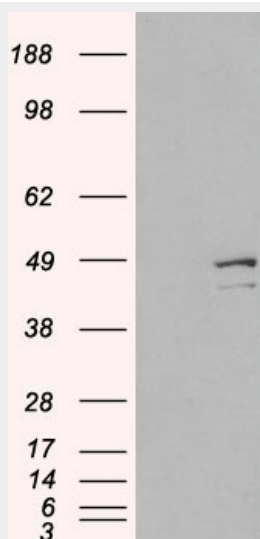


AF1300a (1 µg/ml) staining of HeLa lysate (control in left lane and after si-RNA-mediated DAP3 knock-down expression in right lane) (35 µg protein in RIPA buffer). Level of knock-down relative to

Actin expression level was determined by RT-PCR. Primary incubation was 1 hour. Detected by chemiluminescence.



AF1300a staining (3 µg/ml) of HeLa lysate (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.



HEK293 overexpressing DAP3 (RC223182) and probed with AF1300a (mock transfection in first lane), tested by Origene.

### Goat Anti-DAP3 Antibody - Background

Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in protein synthesis within the mitochondrion. Mitochondrial ribosomes (mitoribosomes) consist of a small 28S subunit and a large 39S subunit. They have an estimated 75% protein to rRNA composition compared to prokaryotic ribosomes, where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly in sequence, and sometimes in biochemical properties, which prevents easy recognition by sequence homology. This gene encodes a 28S subunit protein that also participates in apoptotic pathways which are initiated by tumor necrosis factor- $\alpha$ , Fas ligand, and gamma interferon. This protein potentially binds ATP/GTP and might be a functional partner of the mitoribosomal protein S27. Splice variants that differ in the 5' UTR have been found for this gene; both variants encode the same protein. Pseudogenes corresponding to this gene are found on chromosomes 1q and 2q.

**Goat Anti-DAP3 Antibody - References**

IPS-1 is crucial for DAP3-mediated anoikis induction by caspase-8 activation. Li HM, et al. Cell Death Differ, 2009 Dec. PMID 19644511.

Death-associated protein 3 is overexpressed in human thyroid oncocytic tumours. Jacques C, et al. Br J Cancer, 2009 Jul 7. PMID 19536094.

hNOA1 interacts with complex I and DAP3 and regulates mitochondrial respiration and apoptosis. Tang T, et al. J Biol Chem, 2009 Feb 20. PMID 19103604.

Polymorphisms in mitochondrial genes and prostate cancer risk. Wang L, et al. Cancer Epidemiol Biomarkers Prev, 2008 Dec. PMID 19064571.

Identification of phosphorylation sites in mammalian mitochondrial ribosomal protein DAP3. Miller JL, et al. Protein Sci, 2008 Feb. PMID 18227431.