

**Goat Anti-DAPK2 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1301a****Specification**

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**Goat Anti-DAPK2 Antibody - Product Information**

|                   |                                                   |
|-------------------|---------------------------------------------------|
| Application       | WB, IHC, E                                        |
| Primary Accession | <a href="#">O9UIK4</a>                            |
| Other Accession   | <a href="#">NP_055141</a> , <a href="#">23604</a> |
| Reactivity        | Human, Mouse                                      |
| Predicted         | Rat, Pig, Dog                                     |
| Host              | Goat                                              |
| Clonality         | Polyclonal                                        |
| Concentration     | 100ug/200ul                                       |
| Isotype           | IgG                                               |
| Calculated MW     | 42898                                             |

**Goat Anti-DAPK2 Antibody - Additional Information****Gene ID** 23604**Other Names**

Death-associated protein kinase 2, DAP kinase 2, 2.7.11.1, DAP-kinase-related protein 1, DRP-1, DAPK2

**Dilution**WB~~1:1000  
IHC~~1:100~500  
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-DAPK2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-DAPK2 Antibody - Protein Information****Name** DAPK2**Function**

Calcium/calmodulin-dependent serine/threonine kinase involved in multiple cellular signaling pathways that trigger cell survival, apoptosis, and autophagy. Regulates both type I apoptotic and type II autophagic cell death signals, depending on the cellular setting. The former is caspase-dependent, while the latter is caspase-independent and is characterized by the accumulation of autophagic vesicles. Acts as a mediator of anoikis and a suppressor of beta-catenin-dependent anchorage-independent growth of malignant epithelial cells. May play a role in granulocytic maturation (PubMed:<a href="http://www.uniprot.org/citations/17347302" target="\_blank">17347302</a>). Regulates granulocytic motility by controlling cell spreading and polarization (PubMed:<a href="http://www.uniprot.org/citations/24163421" target="\_blank">24163421</a>).

**Cellular Location**

Cytoplasm. Cytoplasmic vesicle, autophagosome lumen

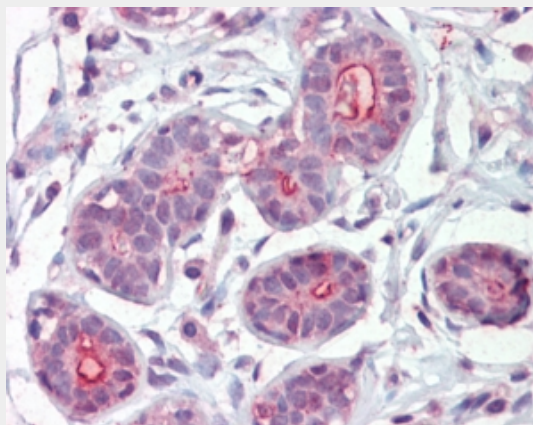
**Tissue Location**

Expressed in neutrophils and eosinophils (PubMed:24163421). Isoform 2 is expressed in embryonic stem cells (at protein level). Isoform 1 is ubiquitously expressed in all tissue types examined with high levels in heart, lung and skeletal muscle

**Goat Anti-DAPK2 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-DAPK2 Antibody - Images**

AF1301a (2.5 µg/ml) staining of paraffin embedded Human Breast. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



AF1301a staining (2 µg/ml) of mouse brain extracts (RIPA buffer, 35 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

#### **Goat Anti-DAPK2 Antibody - Background**

This gene encodes a protein that belongs to the serine/threonine protein kinase family. This protein contains a N-terminal protein kinase domain followed by a conserved calmodulin-binding domain with significant similarity to that of death-associated protein kinase 1 (DAPK1), a positive regulator of programmed cell death. Overexpression of this gene was shown to induce cell apoptosis. It uses multiple polyadenylation sites.

#### **Goat Anti-DAPK2 Antibody - References**

Inactivation of RASSF1A, RARbeta2 and DAP-kinase by promoter methylation correlates with lymph node metastasis in nasopharyngeal carcinoma. Fendri A, et al. Cancer Biol Ther, 2009 Mar. PMID 19221469.

Down-regulation of death-associated protein kinase-2 is required for beta-catenin-induced anoikis resistance of malignant epithelial cells. Li H, et al. J Biol Chem, 2009 Jan 23. PMID 18957423.

DAPK2 is a novel E2F1/KLF6 target gene involved in their proapoptotic function. Britschgi A, et al. Oncogene, 2008 Sep 25. PMID 18521079.

The death-associated protein kinase 2 is up-regulated during normal myeloid differentiation and enhances neutrophil maturation in myeloid leukemic cells. Rizzi M, et al. J Leukoc Biol, 2007 Jun. PMID 17347302.

Global, in vivo, and site-specific phosphorylation dynamics in signaling networks. Olsen JV, et al. Cell, 2006 Nov 3. PMID 17081983.