

## **Goat Anti-DAPK2 Antibody**

Peptide-affinity purified goat antibody Catalog # AF1301a

### **Specification**

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

Application WB, IHC, E
Primary Accession Q9UIK4

Other Accession
Reactivity
Predicted
Host
Reactivity
Reactivity
Reactivity
Human, Mouse
Rat, Pig, Dog
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 lgG/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**

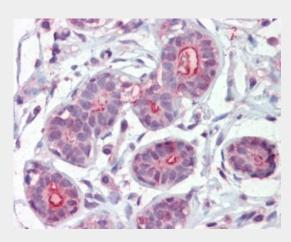
Expressed in neutrophils and eosinophils (PubMed:24163421). Isoform 2 is expressed in embryonic stem cells (at protein level). Isoform 1 is ubiquitously expressed in all tissue types examined with high levels in heart, lung and skeletal muscle

#### **Goat Anti-DAPK2 Antibody - Protocols**

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

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

### Goat Anti-DAPK2 Antibody - Images



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





AF1301a staining (2  $\mu$ g/ml) of mouse brain extracts (RIPA buffer, 35  $\mu$ g 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.