

**Goat Anti-DLC1 (Isoforms 1 and 3) Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1327a****Specification**

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**Goat Anti-DLC1 (Isoforms 1 and 3) Antibody - Product Information**

Application	IHC
Primary Accession	<a href="#">O96QB1</a>
Other Accession	<a href="#">NP_079043</a> , <a href="#">10395</a> , <a href="#">50768 (mouse)</a>
Reactivity	Human
Predicted	Mouse, Pig
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	170591

**Goat Anti-DLC1 (Isoforms 1 and 3) Antibody - Additional Information****Gene ID** 10395**Other Names**

Rho GTPase-activating protein 7, Deleted in liver cancer 1 protein, DLC-1, HP protein, Rho-type GTPase-activating protein 7, START domain-containing protein 12, StARD12, StAR-related lipid transfer protein 12, DLC1, ARHGAP7, KIAA1723, STARD12

**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-DLC1 (Isoforms 1 and 3) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Goat Anti-DLC1 (Isoforms 1 and 3) Antibody - Protein Information****Name** DLC1**Synonyms** ARHGAP7, KIAA1723, STARD12**Function**

Functions as a GTPase-activating protein for the small GTPases RHOA, RHOB, RHOC and CDC42, terminating their downstream signaling. This induces morphological changes and detachment

through cytoskeletal reorganization, playing a critical role in biological processes such as cell migration and proliferation. Also functions *in vivo* as an activator of the phospholipase PLCD1. Active DLC1 increases cell migration velocity but reduces directionality. Required for growth factor-induced epithelial cell migration; in resting cells, interacts with TNS3 while PTEN interacts with the p85 regulatory subunit of the PI3K kinase complex but growth factor stimulation induces phosphorylation of TNS3 and PTEN, causing them to change their binding preference so that PTEN interacts with DLC1 and TNS3 interacts with p85 (PubMed:<a href="http://www.uniprot.org/citations/26166433" target="\_blank">26166433</a>). The PTEN-DLC1 complex translocates to the posterior of migrating cells to activate RHOA while the TNS3-p85 complex translocates to the leading edge of migrating cells to promote RAC1 activation (PubMed:<a href="http://www.uniprot.org/citations/26166433" target="\_blank">26166433</a>).

#### Cellular Location

Cytoplasm. Cell junction, focal adhesion. Membrane; Peripheral membrane protein  
Note=Colocalizes with EF1A1 at actin-rich regions in the cell periphery

#### Tissue Location

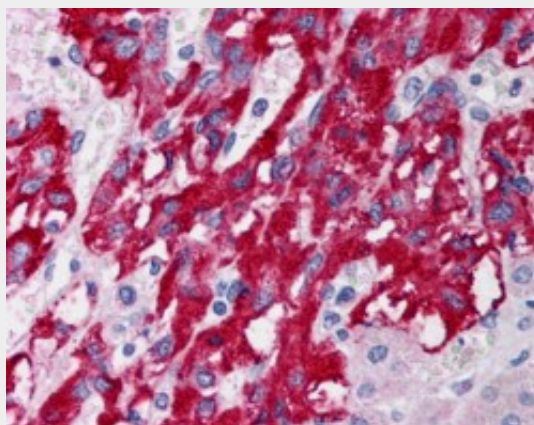
Highest level of expression in the spleen, with rather lower levels in prostate, testis, ovary, small intestine and colon, but none in the thymus

### Goat Anti-DLC1 (Isoforms 1 and 3) 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-DLC1 (Isoforms 1 and 3) Antibody - Images



AF1327a (5 µg/ml) staining of paraffin embedded Human Adrenal Gland. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

### Goat Anti-DLC1 (Isoforms 1 and 3) Antibody - Background

This gene encodes a GTPase-activating protein (GAP) that is a member of the rhoGAP family of

proteins which play a role in the regulation of small GTP-binding proteins. GAP family proteins participate in signaling pathways that regulate cell processes involved in cytoskeletal changes. This gene functions as a tumor suppressor gene in a number of common cancers, including prostate, lung, colorectal, and breast cancers. Multiple transcript variants due to alternative promoters and alternative splicing have been found for this gene.

### **Goat Anti-DLC1 (Isoforms 1 and 3) Antibody - References**

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.

Synergistic antineoplastic effect of DLC1 tumor suppressor protein and histone deacetylase inhibitor, suberoylanilide hydroxamic acid (SAHA), on prostate and liver cancer cells: perspectives for therapeutics. Zhou X, et al. Int J Oncol, 2010 Apr. PMID 20198346.

Genome-wide analysis of chromosomal alterations in patients with esophageal squamous cell carcinoma exposed to tobacco and betel quid from high-risk area in India. Chattopadhyay I, et al. Mutat Res, 2010 Feb 2. PMID 20083228.

Tensin 2 modulates cell contractility in 3D collagen gels through the RhoGAP DLC1. Clark K, et al. J Cell Biochem, 2010 Mar 1. PMID 20069572.