

Anti-DLC1 Antibody Catalog # AP54115

Specification

Anti-DLC1 Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC, IF <u>O96OB1</u> Human, Mouse, Rat Rabbit Polyclonal 170591

Anti-DLC1 Antibody - Additional Information

Gene ID 10395

Other Names ARHGAP7; KIAA1723; STARD12; 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

Target/Specificity KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human DLC1. The exact sequence is proprietary.

Dilution WB~~1:1000 IHC~~1:100~500 IF~~1:50~200

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-DLC1 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:26166433). 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:26166433).

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

Anti-DLC1 Antibody - Protocols

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

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

Anti-DLC1 Antibody - Images

Anti-DLC1 Antibody - Background

Rabbit polyclonal antibody to DLC1