

Anti-DLC1 Antibody

Catalog # AP54115

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q96QB1
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	170591

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~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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](#)).

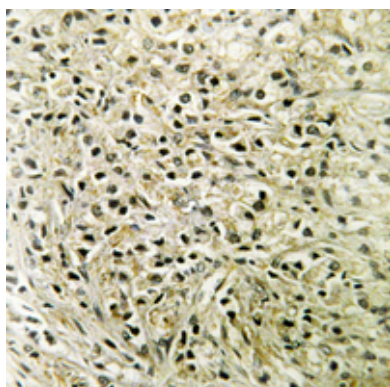
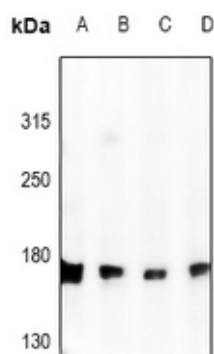
Cellular Location

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

Images



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