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Rabbit Anti-DLC1 + DLC2/AF350 Conjugated antibody

SL14340R-AF350

Product Name	Anti-DLC1 + DLC2/AF350
Chinese Name	AF350 标记的肝癌缺失基因 1/2 抗体
Alias	ARHGAP 7; ARHGAP7; Deleted in liver cancer 1; Deleted in liver cancer 1 protein; DLC 1; Dlc-1; DLC1; FLJ21120; HP; HP protein; KIAA1723; p122 RhoGAP; RHG07_HUMAN; Rho GTPase activating protein 7; Rho GTPase-activating protein 7; Rho type GTPase activating protein 7; Rho-type GTPase-activating protein 7; StAR related lipid transfer protein 12; StAR-related lipid transfer protein 12; STARD 12; StARD12; START domain containing protein 12; START domain-containing protein 12; STA13_HUMAN; StAR-related lipid transfer protein 13; 46H23.2; Deleted in liver cancer 2 protein; DLC-2; AltName: Full=Rho GTPase-activating protein; START domain-containing protein 13; StARD13.
Research Area	Tumour Cell biology Signal transduction Mitochondrion Epigenetics G protein signal
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat(predicted:Human,Mouse,Rabbit,Sheep)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	171/122kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Rho GTPase-activating protein 7
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The

lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.[provided by RefSeq, Apr 2010]

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.

Product Detail

Subunit:
Interacts with EF1A1, facilitates EF1A1 distribution to the membrane periphery and ruffles upon growth factor stimulation and suppresses cell migration.

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

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

Post-translational modifications:
Phosphorylation at Ser-88 appears to control the dimer-monomer transition. According to PubMed:15193260, it is phosphorylated at Ser-88 by PAK1, however, according to PubMed:18650427, the DYNLL1 dimer is not accessible for PAK1 and the phosphorylation could not be demonstrated in vitro.

Similarity:
Contains 1 Rho-GAP domain.
Contains 1 SAM (sterile alpha motif) domain.
Contains 1 START domain.

Database links:

Entrez Gene: 10395 Human

Entrez Gene: 90627 Human

Entrez Gene: 50768 Mouse

Omim: 604258 Human

Omim: 609866 Human

SwissProt: Q96QB1 Human

SwissProt: Q9Y3M8 Human

SwissProt: Q9R0Z9 Mouse

Unigene: 134296 Human

Unigene: 210875 Mouse

SwissProt: P63170 Rat

Unigene: 5120 Human

Unigene: 256858 Mouse

Unigene: 35769 Rat

Unigene: 507704 Human

Unigene: 721224 Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.