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ELMO2 Rabbit pAb

Catalog # AP97190

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q96JJ3
Other Accession	Q96JJ3
Reactivity	Human
Predicted	Rat, Pig, Mouse, Rabbit, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	82615
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ELMO2
Epitope Specificity	101-200/720
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 ELMO domain. Contains 1 PH domain.
SUBUNIT	Interacts with the SH3-domain of DOCK1 via its SH3-binding site. Probably part of a complex with DOCK1 and RAC1. Probably part of a complex with DOCK1 and CRK isoform CRK-II. Interacts with ARHGEF16, DOCK4 and EPHA2; mediates activation of RAC1 by EPHA2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Elmo (engulfment and cell motility) proteins share similarity to C. elegans CED-12. The C. elegans genes ced-2, ced-5, ced-10, and ced-12 and their mammalian homologs CRKII, DOCK1, RAC1 and ELMO mediate cytoskeletal rearrangements during phagocytosis of apoptotic cells and cell motility. Elmo1 associates with DOCK 180 and may influence phagocytosis and effect cell shape changes. Src family kinase mediated tyrosine phosphorylation of ELMO1 influences signaling through Elmo1/Crk/DOCK 180 pathways. Elmo2 interacts directly with Rho G in a GTP-dependent manner and forms a ternary complex with DOCK 180 to induce activation of Rac 1. The RhoG-Elmo2-DOCK 180 pathway is required for activation of Rac 1 and cell spreading mediated by integrin, as well as for neurite outgrowth induced by nerve growth factor. Elmo3 acts in assocation with DOCK180 and Crk II and may be required in complex with DOCK180 to activate Rac/Rho small GTPases.

Additional Information

Gene ID	63916
Other Names	CED-12; CED12; Ced-12A; ELMO-2; VMPI; 1190002F24Rik; ELMO2_BOVIN; ELMO2; ELMO2_HUMAN; Protein ced-12 homolog A (hCed-12A); CED12A; KIAA1834; ELMO2_MOUSE; Protein ced-12 homolog A; engulfment and cell motility 2; engulfment and cell motility 2 (ced-12 homolog, C. elegans)

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ELMO2
Synonyms	CED12A, KIAA1834
Function	Regulates the activity of DOCK guanine nucleotide exchange factors (GEFs) (PubMed:11595183, PubMed:11703939, PubMed:20679435, PubMed:32651375, PubMed:27476657). Acts in association with DOCK1, DOCK2, DOCK4 and CRK (PubMed:11595183, PubMed:20679435, PubMed:32651375, PubMed:27476657). Involved in cytoskeletal rearrangements required for phagocytosis of apoptotic cells and cell motility (PubMed:11595183).
Cellular Location	Cytoplasm. Cytoplasm, cytosol. Membrane
Tissue Location	Widely expressed, with a higher expression in skeletal muscle, kidney and placenta.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.