10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Rab 40B Polyclonal Antibody

Catalog # AP72117

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q12829
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30956

Additional Information

Gene ID	10966
Other Names	RAB40B; SEC4L; Ras-related protein Rab-40B; SOCS box-containing protein RAR; Protein Rar
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	RAB40B (HGNC:18284)
Synonyms	SEC4L
Function	RAB40B small GTPase acts as substrate-recognition components of the ECS(RAB40B) E3 ubiquitin ligase complex which mediates the ubiquitination of target proteins (PubMed:33999101, PubMed:35293963). The Rab40 subfamily belongs to the Rab family that are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion (PubMed:27789576). As part of the ECS(RAB40B) complex, GTP-bound RAB40B promotes LIMA1/EPLIN ubiquitination and degradation, thereby regulating leading-edge actin dynamics during cell migration (PubMed:33999101). As part of the ECS(RAB40B) complex, GTP-bound RAB40B also ubiquitinates RAP2A GTPase which promotes its localization to lamellipodia and activation to drive cell migration. The

ECS(RAB40B) complex does not mediate canonical ubiquitin-dependent degradation of RAP2 (PubMed:35293963). RAB40B also binds TKS5/SH3PXD2A effector independently from ECS complex to promote invadopodia-mediated extracellular matrix degradation (PubMed:27789576).

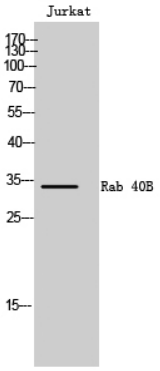
Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasm, cytosol. Cell projection, lamellipodium membrane. Cell projection, ruffle. Note=Mainly localized in the cytosol (PubMed:33999101). A subpopulation is present at the lamellipodia, where it colocalizes with actin ruffles (PubMed:33999101). Colocalized with RAP2A at the lamellipodia plasma membrane (PubMed:35293963).

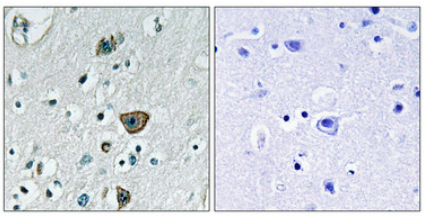
Background

May be a substrate-recognition component of a SCF-like ECS (Elongin-Cullin-SOCS-box protein) E3 ubiquitin ligase complex which mediates the ubiquitination and subsequent proteasomal degradation of target proteins.

Images



Western Blot analysis of Jurkat cells using Rab 40B Polyclonal Antibody



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

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