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Anti-RAB40B Antibody

Catalog # AP51463

Product Information

Application	WB, IHC
Primary Accession	Q12829
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	30956

Additional Information

Gene ID	10966
Other Names	SEC4L; Ras-related protein Rab-40B; SOCS box-containing protein RAR; Protein Rar
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human RAB40B. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500
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

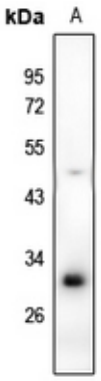
Name	RAB40B (HGNC:18284)
Synonyms	SEC4L
Function	RAB40B small GTPase acts as substrate-recognition components of the ECS(RAB40B) E3 ubiquitin ligase complex which mediates the ubiquitination of target proteins (PubMed:33999101, PubMed:35293963). The Rab40 subfamily belongs to the Rab family that are 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).

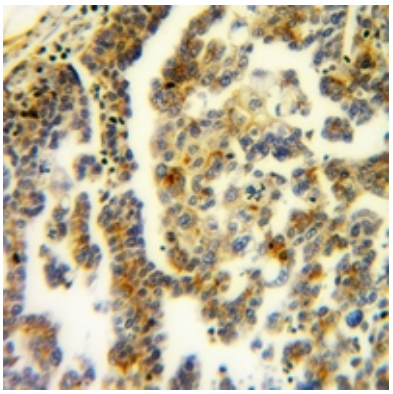
References

Peng H.,et al.Submitted (JAN-1994) to the EMBL/GenBank/DDBJ databases.

Images



Western blot analysis of RAB40B expression in SGC7901 (A) whole cell lysates. (Predicted band size: 30 kD; Observed band size: 31 kD)



Immunohistochemical analysis of RAB40B staining in human ovarian cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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