

Rab5 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6974B

Specification

Rab5 Antibody (C-term) - Product Information

Application	IF, WB, IHC-P, FC,E
Primary Accession	P20339
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	23659
Antigen Region	182-211

Rab5 Antibody (C-term) - Additional Information

Gene ID 5868

Other Names

Ras-related protein Rab-5A, RAB5A, RAB5

Target/Specificity

This Rab5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 182-211 amino acids from the C-terminal region of human Rab5.

Dilution

IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Rab5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Rab5 Antibody (C-term) - Protein Information

Name RAB5A

Synonyms RAB5

Function Small GTPase which cycles between active GTP-bound and inactive GDP-bound states. In its active state, binds to a variety of effector proteins to regulate cellular responses such as of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Active GTP-bound form is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. RAB5A is required for the fusion of plasma membranes and early endosomes (PubMed:[10818110](#), PubMed:[14617813](#), PubMed:[15378032](#), PubMed:[16410077](#)). Contributes to the regulation of filopodia extension (PubMed:[14978216](#)). Required for the exosomal release of SDCBP, CD63, PDCD6IP and syndecan (PubMed:[22660413](#)). Regulates maturation of apoptotic cell-containing phagosomes, probably downstream of DYN2 and PIK3C3 (By similarity).

Cellular Location

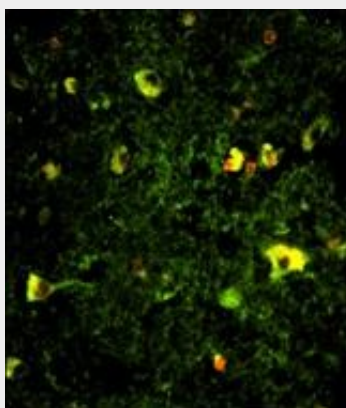
Cell membrane; Lipid-anchor; Cytoplasmic side. Early endosome membrane; Lipid- anchor. Melanosome. Cytoplasmic vesicle. Cell projection, ruffle {ECO:0000250|UniProtKB:P18066}. Membrane Cytoplasm, cytosol. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q9CQD1}. Endosome membrane Note=Enriched in stage I melanosomes (PubMed:17081065). Alternates between membrane-bound and cytosolic forms (Probable) {ECO:0000269|PubMed:17081065, ECO:0000305}

Rab5 Antibody (C-term) - Protocols

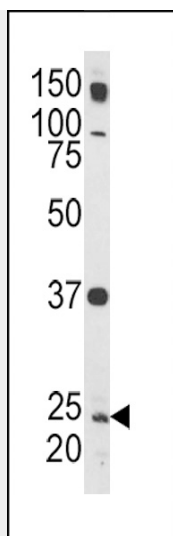
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

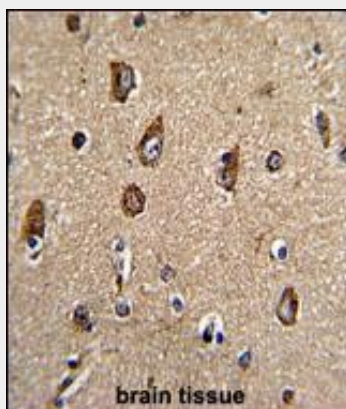
Rab5 Antibody (C-term) - Images



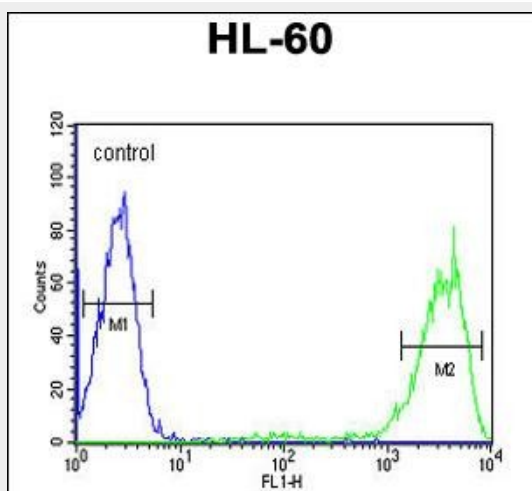
Immunofluorescence analysis of Rab5 Antibody (C-term) with paraffin-embedded human brain tissue . 0.025 mg/ml primary antibody was followed by FITC-conjugated goat anti-rabbit IgG (whole molecule). FITC emits green fluorescence.Red counterstaining is PI.



Western blot analysis of Rab5 Antibody (C-term) (Cat. #AP6974b) in HL-60 cell line lysates (35ug/lane). RAB5 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue with Rab5 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Rab5 Antibody (C-term) (Cat. #AP6974b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Rab5 Antibody (C-term) - Background

Rab5 is required for the fusion of plasma membranes and early endosomes.

Rab5 Antibody (C-term) - References

Farnsworth, C.C., et.al., Proc. Natl. Acad. Sci. U.S.A. 91 (25), 11963-11967 (1994)

Rab5 Antibody (C-term) - Citations

- [Neuromelanin organelles are specialized autolysosomes that accumulate undegraded proteins and lipids in aging human brain and are likely involved in Parkinson's disease.](#)