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Rab5 Antibody
Rabbit mAb
Catalog # AP90532

Specification

Rab5 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P20339
Reactivity	**Rat**
Clonality	**Monoclonal**

Other Names
RAB5A;RAB5; RAS associated protein RAB5A; Ras related protein Rab 5A;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**23659 Da**

Rab5 Antibody - Additional Information

Dilution	**WB~~1:1000** **IHC~~1:100~500**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human Rab5**
Description	**Rab5 is a member of the Ras superfamily of small Rab GTPases. Rab5 is localized at the plasma membrane and early endosomes and functions as a key regulator of vesicular trafficking during early endocytosis (1). The conformational change between Rab5 GTP/GDP states is essential for its biological function as a rate limiting regulator at multiple steps during endocytosis.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

Rab5 Antibody - Protein Information

Name RAB5A (HGNC:9783)

Synonyms RAB5

Function
The small GTPases Rab 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. 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).

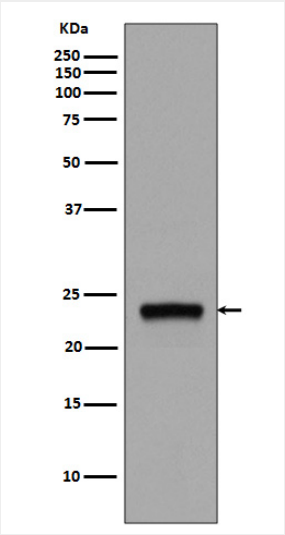
Cellular Location
Cell membrane; Lipid-anchor; Cytoplasmic side. Early endosome membrane; Lipid- anchor. Melanosome. Cytoplasmic vesicle. Cell projection, ruffle {ECO:0000250|UniProtKB:P18066}. Membrane Cytoplasm, cytosol. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q9CQD1}. Endosome 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 - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Rab5 Antibody - Images



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Western blot analysis of Rab5 expression in MCF-7 cell lysate.