

# Rab5 Antibody

Rabbit mAb Catalog # AP90532

#### **Product Information**

ApplicationWB, IHCPrimary AccessionP20339

**Reactivity** Rat, Human, Mouse

**Clonality** Monoclonal

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

IsotypeRabbit IgGHostRabbitCalculated MW23659

## **Additional Information**

**Dilution** WB 1:500~1:2000 IHC 1:50~1:200

**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.

#### **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:<u>22660413</u>). Regulates

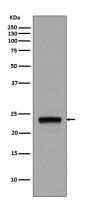
maturation of apoptotic cell-containing phagosomes, probably downstream of

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}

# **Images**



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

Image not found: 202311/AP90532-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human colon, using Rab5 Antibody.

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