

# **KD-Validated Anti-RAB5A Rabbit Monoclonal Antibody**

Rabbit monoclonal antibody Catalog # AGI1828

#### **Specification**

## KD-Validated Anti-RAB5A Rabbit Monoclonal Antibody - Product Information

Application WB, FC
Primary Accession P20339
Reactivity Human
Clonality Monoclonal
Isotype Rabbit IgG

Calculated MW Predicted, 24 kDa, observed, 24 kDa KDa

Gene Name RAB5A

Aliases RAB5A; RAB5A, Member RAS Oncogene

Family; RAB5; RAS-Associated Protein RAB5A; Ras-Related Protein Rab-5A; EC

3.6.5.2

Immunogen A synthesized peptide derived from human

Rab5

## KD-Validated Anti-RAB5A Rabbit Monoclonal Antibody - Additional Information

Gene ID **5868** 

**Other Names** 

Ras-related protein Rab-5A, 3.6.5.2, RAB5A, RAB5

## KD-Validated Anti-RAB5A Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/10818110" target="\_blank">10818110</a>, PubMed:<a href="http://www.uniprot.org/citations/14617813" target="\_blank">14617813</a>, PubMed:<a href="http://www.uniprot.org/citations/15378032" target="\_blank">15378032</a>, PubMed:<a href="http://www.uniprot.org/citations/16410077" target="\_blank">16410077</a>). Contributes to the regulation of filopodia extension (PubMed:<a

href="http://www.uniprot.org/citations/14978216" target="\_blank">14978216</a>). Required for the exosomal release of SDCBP, CD63, PDCD6IP and syndecan (PubMed:<a

href="http://www.uniprot.org/citations/22660413" target="\_blank">22660413</a>). Regulates maturation of apoptotic cell-containing phagosomes, probably downstream of DYN2 and PIK3C3 (By similarity).



#### **Cellular Location**

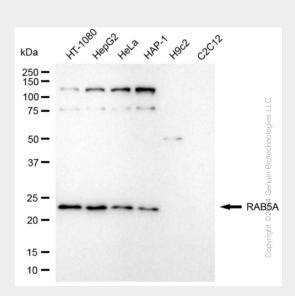
Cell membrane; Lipid-anchor; Cytoplasmic side. Early endosome membrane; Lipid- anchor. Melanosome. Cytoplasmic vesicle. Cell projection, ruffle {ECO:0000250|UniProtKB:P18066}. Membrane Cytoplasm, cytosol. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q9CQD1}. Endosome membrane Note=Enriched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

#### KD-Validated Anti-RAB5A Rabbit Monoclonal Antibody - Protocols

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

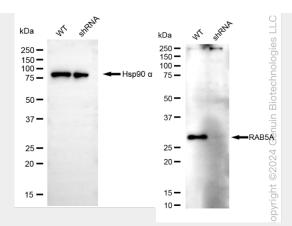
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## KD-Validated Anti-RAB5A Rabbit Monoclonal Antibody - Images

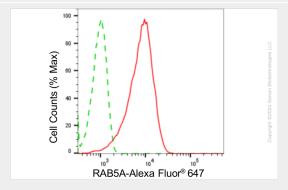


Western blotting analysis using anti-RAB5A antibody (Cat#AGI1828). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-RAB5A antibody (Cat#AGI1828, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-RAB5A antibody (Cat#AGI1828). RAB5A expression in wild-type (WT) and RAB5A shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-RAB5A antibody (Cat#AGI1828, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of RAB5A expression in HepG2 cells using anti-RAB5A antibody (Cat#AGI1828, 1:2,000). Green, isotype control; red, RAB5A.