

Rab12 Rabbit mAb [MJFF-A-3F6]

Catalog No.: A27275 **Recombinant**

Basic Information

Observed MW

27kDa/37kDa

Calculated MW

27kDa

Category

Primary antibody

Applications

IP, ELISA

Cross-Reactivity

Human

CloneNo number

ARC5165

Background

Rab12 is a member of the RAS oncogene family and plays a crucial role in intracellular membrane trafficking. This small GTPase protein is involved in the transport of vesicles, particularly from recycling endosomes to lysosomes, and is essential for processes like autophagy and the degradation of the transferrin receptor. Rab12 cycles between an inactive GDP-bound form and an active GTP-bound form, recruiting various effectors responsible for vesicle formation, movement, and fusion. In addition to being a substrate for phosphorylation by LRRK2 (Leucine-Rich Repeat Kinase 2), Rab12 has recently been identified as its significant regulator. It has been shown that Rab12 can activate LRRK2, leading to increased phosphorylation of Rab10, another protein involved in intracellular trafficking. This activation is particularly notable in the context of lysosomal damage, where Rab12 helps recruit LRRK2 to lysosomes, enhancing its activity. Dysregulation of this pathway due to pathogenic LRRK2 mutations can contribute to the neurodegenerative processes observed in Parkinson's disease.

Recommended Dilutions

IP 0.5µg-4µg antibody for
200µg-400µg extracts of
whole cells

ELISA Recommended starting
concentration is 1 µg/mL.
Please optimize the
concentration based on
your specific assay
requirements.

Immunogen Information

Gene ID

201475

Swiss Prot

Q6IQ22

Immunogen

Recombinant protein (or fragment). This information is considered to be commercially sensitive.

Synonyms

RAB12

Contact

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Product Information

Source

Rabbit

Isotype

IgG

Purification

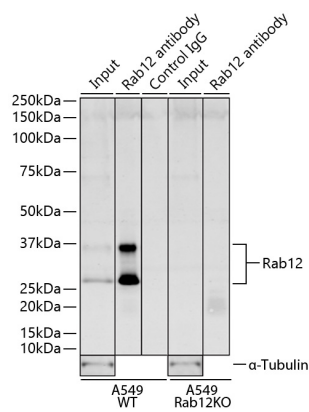
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.09% Sodium azide, 0.05% BSA, 50% glycerol, pH7.3

Validation Data



Immunoprecipitation of Rab12 from 250 µg of extracts of A549 wild-type (WT) or A549 Rab12 knock-out (Rab12 KO) cells was performed using 1.5 µg of Rab12 Rabbit mAb [MJFF-A-3F6] (A27275) conjugated to MyOne™ Epoxy Dynabeads®. Negative Control IP (Control IgG) was performed using MyOne™ Epoxy Dynabeads® conjugated with Bovine Serum Albumin. IP samples were eluted with 1X reducing Laemmli Buffer. The Input lane represents 4% of the total input. Western blot analysis of immunoprecipitates was conducted using Rab12 Rabbit mAb [MJFF-A-3F6] (A27275) at a dilution of 1:1000.