

A27275

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# Rab12 Rabbit mAb [MJFF-A-3F6]

Catalog No.: A27275 **Recombinant**

## Basic Information

### Observed MW

27kDa/37kDa

### Calculated MW

27kDa

### Category

Monoclonal Antibody

### Applications

IP,ELISA

### Cross-Reactivity

Human

## 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.

## Contact

 [www.abclonal.com](http://www.abclonal.com)

## Immunogen Information

### Gene ID

201475

### Swiss Prot

Q6IQ22

### Immunogen

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

### Synonyms

RAB12

## Product Information

### Source

Rabbit

### Isotype

IgG

### Purification

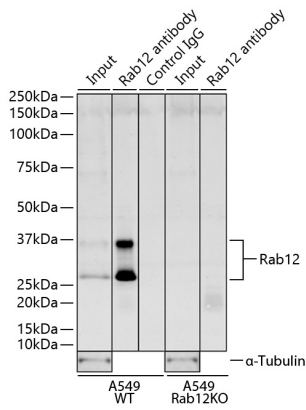
Affinity purification

### 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  $\mu$ g of extracts of A549 wild-type (WT) or A549 Rab12 knock-out (Rab12 KO) cells was performed using 1.5  $\mu$ g 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.