

Functional Rab6-GTP Antibody, mAb (recombinant)

Catalog # ADP0034

Specification

Functional Rab6-GTP Antibody, mAb (recombinant) - Product Information

Application Primary Accession Reactivity Host

Clonality
Isotype
Gene Source
Application Note
Calculated MW
Dilution
Description

ICC P20340

Human, Mouse, Drosophila Purified From HEK 293 Cell culture

Supernatant.
Monoclonal
Human IgG2\(\lambda\)
Human
ICC(1:1'000)

23593 ICC~~N/A

anti-Rab6-GTP monoclonal antibody (recombinant) (AA2) is composed of human variable regions (VH and VL) (λ -chain) of immunoglobulin fused to the human IgG2 Fc domain.

anti-Rab6-GTP monoclonal antibody (recombinant) (AA2) is an antibody developed by antibody phage display technology using a human naive antibody gene library. These libraries consist of scFv (single chain fragment variable) composed of VH (variable domain of the human immunoglobulin heavy chain) and VL (variable domain of the human immunoglobulin light chain) connected by a polypeptide linker. The antibody fragments are displayed on the surface of filamentous bacteriophage (M13). This scFv was selected by affinity selection on antigen in a process termed panning. Multiple rounds of panning are performed to enrich for antigen-specific scFv-phage. Monoclonal antibodies are subsequently identified by screening after each round of selection. The selected monoclonal scFv is cloned into an appropriate vector containing a Fc portion of interest and then produced in mammalian cells to generate an IgG like scFv-Fc fusion protein.

Functional Rab6-GTP Antibody, mAb (recombinant) - Additional Information



Gene ID 5870

Other Names

Ras-related Protein Rab-6

Target/Specificity

Recognizes human, mouse and Drosophila GTP-bound Rab6a and Rab6b and mutant Rab6Q72L. Does not detect Rab6•GDP.

Format

Liquid. In PBS containing 10% glycerol and 0.02% sodium azide.

Reconstitution & Storage

Stable for at least 1 month after receipt when stored at +4°C. Stable for at least 1 year after receipt when stored at -20°C.

Precautions

Functional Rab6-GTP Antibody, mAb (recombinant) is for research use only and not for use in diagnostic or therapeutic procedures.

Functional Rab6-GTP Antibody, mAb (recombinant) - Protein Information

Name RAB6A (HGNC:9786)

Synonyms RAB6

Function

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed:25962623). 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 (PubMed:25962623). RAB6A acts as a regulator of COPI-independent retrograde transport from the Golgi apparatus towards the endoplasmic reticulum (ER) (PubMed:25962623). Has a low GTPase activity (PubMed:25962623). Recruits VPS13B to the Golgi membrane (PubMed:25492866). Plays a role in neuron projection development (Probable).

Cellular Location

Golgi apparatus membrane; Lipid- anchor. Cytoplasmic vesicle, secretory vesicle, acrosome membrane {ECO:0000250|UniProtKB:P35279}; Peripheral membrane protein. Note=BICD2 facilitates its targeting to Golgi apparatus membrane. [Isoform 2]: Golgi apparatus membrane; Lipid-anchor

Tissue Location Ubiquitous..

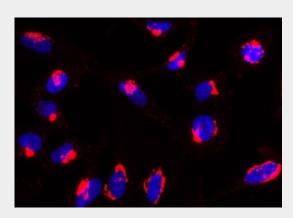
Functional Rab6-GTP Antibody, mAb (recombinant) - Protocols

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

Functional Rab6-GTP Antibody, mAb (recombinant) - Images



Rab6-GTP is detected by immunocytochemistry using anti-Rab6-GTP, mAb (AA2).

Method: HeLa cells are grown in standard culture conditions, fixed with paraformaldehyde (3%), permeablized in PBS+ BSA 0.2 % + Saponin 0.05 % and incubated with anti-Rab6-GTP, mAb (AA2) (1ug /ml) in PBS-BSA-Saponin. After incubation for 30 min at RT and several washes in PBS, cells are treated with a goat anti-human (Cy3) antibody in PBS-BSA-Saponin for 30 min at RT, washed and mounted in Moewiol. Nuclei are stained with DAPI.

Picture courtesy of Dr Moutel, Dr Franck Perez Lab, Curie Institute, Paris.

Functional Rab6-GTP Antibody, mAb (recombinant) - Background

Rab6 is involved in protein transport. It is a regulator of membrane traffic from the Golgi apparatus towards the endoplasmic reticulum (ER).