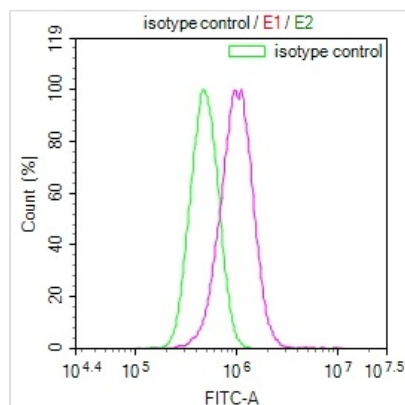




RAB27A Recombinant Monoclonal Antibody

Product Code	CSB-RA285197A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P51159
Immunogen	A synthesized peptide derived from human RAB27A
Species Reactivity	Human
Tested Applications	ELISA, FC; Recommended dilution: FC:1:50-1:200
Relevance	Small GTPase which cycles between active GTP-bound and inactive GDP-bound states. In its active state, binds to a variety of effector proteins to regulate homeostasis of late endocytic pathway, including endosomal positioning, maturation and secretion (PubMed:30771381). Plays a role in cytotoxic granule exocytosis in lymphocytes. Required for both granule maturation and granule docking and priming at the immunologic synapse. {ECO:0000269 PubMed:18812475, ECO:0000269 PubMed:30771381}.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Signal transduction
Gene Names	RAB27A
Clone No.	2E8

Image



Overlay Peak curve showing PC3 cells stained with CSB-RA285197A0HU (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10⁶cells) for 45min at 4?. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG(H+L) at 1:200 dilution for 35min at 4?. Control antibody (green line) was rabbit IgG (1ug/1*10⁶cells) used under the same conditions. Acquisition of >10,000 events was performed.



Description

The production of the RAB27A recombinant monoclonal antibody involves a set of intricate procedures. The initial step involves harvesting the RAB27A monoclonal antibody and analyzing its gene sequence. The RAB27A monoclonal antibody gene is constructed into a plasmid vector and then introduced into a host cell line for culture. During the RAB27A monoclonal antibody production process, a synthesized peptide derived from human RAB27A is used as the immunogen. The resulting RAB27A recombinant monoclonal antibody is purified using affinity chromatography and assessed for specificity by using ELISA and FC applications. It only detects human RAB27A protein.

RAB27A is a protein that belongs to the RAS oncogene family of small GTPases. Its main function is to regulate the transport and secretion of vesicles containing molecules such as enzymes, hormones, and neurotransmitters. Specifically, RAB27A is involved in the transport and secretion of lysosome-related organelles (LROs) such as melanosomes, platelet-dense granules, and cytotoxic T lymphocyte granules. Mutations in the RAB27A gene have been associated with several genetic disorders, including Griscelli syndrome type 2, which is characterized by pigmentary dilution of the skin and hair, and immunodeficiency.