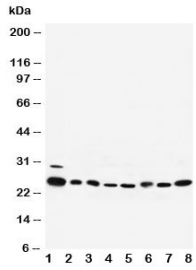
Rab5 Antibody (R30866)

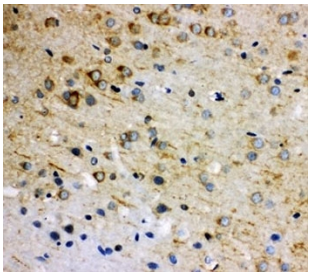
Catalog No.	Formulation	Size
R30866	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide/thimerosal
UniProt	P20339
Localization	Cytoplasmic
Applications	Western blot: 0.5-1ug/ml IHC (FFPE): 0.5-1ug/ml
Limitations	This Rab5 antibody is available for research use only.



Western blot testing of Rab5 antibody and Lane 1: rat brain; 2: rat ovary; 3: human placenta; 4: HeLa; 5: 293T; 6: A375; 7: COLO320; 8: MM453 cell lysate. Predicted/observed molecular weight: ~25kDa.



IHC-P: Rab5 antibody testing of rat brain tissue. HIER: steamed with pH6 citrate buffer.

Description

Ras-associated protein 5A, also called RAB5, is a protein that in humans is encoded by the RAB5A gene. RAB5 is a rate-limiting component of the machinery regulating the kinetics of membrane traffic in the early endocytic pathway. Tuberin functions as a RAB5GAP in vivo to negatively regulate RAB5-GTP activity in endocytosis. Ectopically expressed ALS2 localized with RAB5 and early endosome antigen-1 onto early endosomal compartments and stimulated the enlargement of endosomes in cultured cortical neurons. The protein is indispensable for a form of receptor tyrosine kinase-induced actin remodeling called circular ruffling. It signals to the actin cytoskeleton through RNTRE, a RAB5-specific GTPase-activating protein(GAP). RAB5 activity on phagosome membranes began to increase on disassembly of the actin coat encapsulating phagosomes. Activation of the protein was either continuous or repetitive for up to 10 minutes, but it ended before the collapse of engulfed apoptotic cells. Expression of a dominant-negative mutant delayed this collapse of apoptotic thymocytes, showing a role for RAB5 in phagosome maturation.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the Rab5 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

Amino acids 138-155 (ANKRAVDFQEAQSYADDN) were used as the immunogen for this Rab5 antibody (100% homologous in human, mouse and rat).

Storage

After reconstitution, the Rab5 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Copyright © NSJ Bioreagents. All rights reserved.