SANTA CRUZ BIOTECHNOLOGY, INC.

RAB3IP (B-1): sc-518221

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies all of which are thought to play an important role in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum (ER) to various stacks of the Golgi complex and to secretory vesicles involves the movement of carrier vesicles and requires Rab protein function. RAB3IP (RAB3A interacting protein), also known as Rabin-3 or SSX2-IP, is a 406 amino acid protein that localizes to both the nucleus and the cytoplasm and exists as multiple alternatively spliced isoforms. Expressed in placenta, brain, heart, pancreas and kidney, RAB3IP interacts with Rab 3A, Rab 3B and SSX2 and, via this interaction, may regulate Rab function, as well as SSX2-induced malignancies.

REFERENCES

1. Olkkonen, V.M., et al. 1993. Molecular cloning and subcellular localization of three GTP-binding proteins of the Rab subfamily. J. Cell Sci. 106: 1249-1261.
2. Brondyk, W.H., et al. 1995. Interaction cloning of Rabin3, a novel protein that associates with the Ras-like GTPase Rab3A. Mol. Cell. Biol. 15: 1137-1143.
3. Chen, D., et al. 1997. RAB GTPases expressed in human melanoma cells. Biochim. Biophys. Acta 1355: 1-6.
4. de Bruijn, D.R., et al. 2002. The cancer-related protein SSX2 interacts with the human homologue of a Ras-like GTPase interactor, RAB3IP, and a novel nuclear protein, SSX2IP. Genes Chromosomes Cancer. 34: 285-298.
5. Schlüter, O.M., et al. 2002. Localization versus function of Rab3 proteins. Evidence for a common regulatory role in controlling fusion. J. Biol. Chem. 277: 40919-40929.

CHROMOSOMAL LOCATION

Genetic locus: RAB3IP (human) mapping to 12q15.

SOURCE

RAB3IP (B-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 270-295 of RAB3IP of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RAB3IP (B-1) is available conjugated to agarose (sc-518221 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-518221 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518221 PE), fluorescein (sc-518221 FITC), Alexa Fluor® 488 (sc-518221 AF488), Alexa Fluor® 546 (sc-518221 AF546), Alexa Fluor® 594 (sc-518221 AF594) or Alexa Fluor® 647 (sc-518221 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518221 AF680) or Alexa Fluor® 790 (sc-518221 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

RAB3IP (B-1) is recommended for detection of RAB3IP of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RAB3IP siRNA (h): sc-95935, RAB3IP shRNA Plasmid (h): sc-95935-SH and RAB3IP shRNA (h) Lentiviral Particles: sc-95935-V.

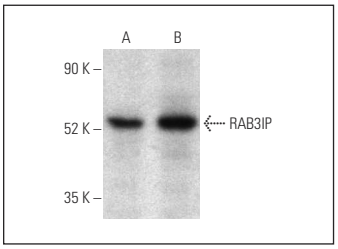
Molecular Weight of RAB3IP: 56 kDa.

Positive Controls: U-698-M whole cell lysate: sc-364799.

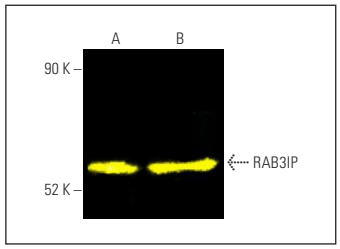
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



RAB3IP (B-1): sc-518221. Western blot analysis of RAB3IP expression in U-698-M (**A**) and JM1 (**B**) whole cell lysates. Detection reagent used: m-IgG_1 BP-HRP: sc-525408.



RAB3IP (B-1): sc-518221. Fluorescent western blot analysis of RAB3IP expression in U-698-M (**A**) and JM1 (**B**) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG_1 BP-CFL 488: sc-533661.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.