10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

RUSC2 Antibody

Catalog # ASC11430

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q8N2Y8
Other Accession	NP_055621, 55741719
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	161225
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	RUSC2 antibody can be used for detection of RUSC2 by Western blot at 1 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL.

Additional Information

Gene ID	9853
Other Names	Iporin, Interacting protein of Rab1, RUN and SH3 domain-containing protein 2, RUSC2, KIAA0375
Target/Specificity	RUSC2; At least three isoforms are known to exist; this antibody will detect all three isoforms. This antibody is predicted to not cross-react with RUSC1.
Reconstitution & Storage	RUSC2 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	RUSC2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RUSC2 {ECO:0000303|PubMed:27612186, ECO:0000312|HGNC:HGNC:23625}
Function	Associates with the adapter-like complex 4 (AP-4) and may therefore play a role in vesicular trafficking of proteins at the trans-Golgi network.
Cellular Location	Cytoplasm, cytosol. Cell membrane. Note=Cytosolic punctate distribution. Also observed in the perinuclear region. Colocalizes with RAB35 at the membrane protrusions of HEK293T cells (PubMed:30905672)

Tissue Location	Widely expressed, with highest levels in brain and testis.

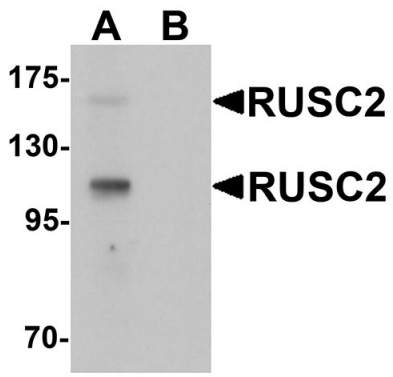
Background

RUSC2 Antibody: RUSC2, also known as Iporin, shares with the related protein RUSC1 a common domain structure of RUN, leucine zipper and SH3 domain in addition to over 30% amino acid identity. RUSC2 is a rab1-interacting protein that also interacts with GM130, another rab1-interacting protein. RUSC2 interacts with specific rab1 isoforms with different rab-binding specificity. It has been suggested that RUSC2 may function as a link between the targeting of ER derived vesicles triggered by the rab1 GTPase and a signaling pathway composed of proteins containing SH3 and/or poly-proline regions.

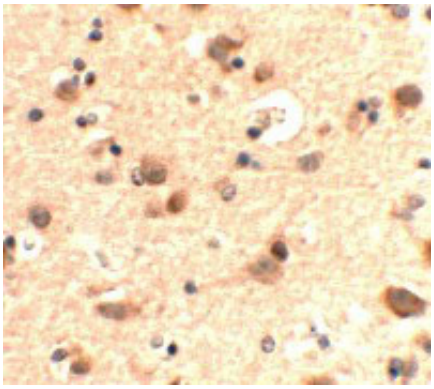
References

Bayer M, Fischer J, Kremerskthen J, et al. Identification and characterization of Iporin as a novel interaction partner for rab1. BMC Cell Biol. 2005; 29:6:15.
Katoh M and Katoh M. Characterization of RUSC1 and RUSC2 genes in silico. Oncol. Rep. 2004; 12:933-8
Fukuda M, Kobayashi H, Ishibashi K, et al. Genome-wide investigation of the rab binding activity of RUN domains: development of a novel tool that specifically traps GTP-Rab35. Cell Struct. Funct. 2011; 36:155-70

Images

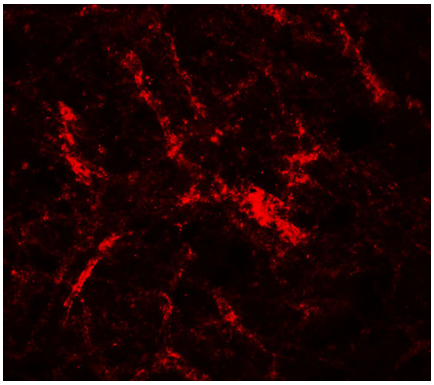


Western blot analysis of RUSC2 in SK-N-SH cell lysate with RUSC2 antibody at 1 µg/mL in (A) the absence and (B) the presence of blocking peptide



Immunohistochemistry of RUSC2 in human brain tissue with RUSC2 antibody at 5 µg/mL.

Immunofluorescence of RUSC2 in human brain tissue with RUSC2 antibody at 20 µg/mL.



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