

SIPA1 Antibody

Catalog # ASC11423

Product Information

Application	WB, IF, E
Primary Accession	Q96FS4
Other Accession	AAH10492 , 206725523
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	112149
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	SIPA1 antibody can be used for detection of EPAC1 by Western blot at 1 μ g/mL. Antibody can also be used for immunofluorescence starting at 20 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	6494
Other Names	Signal-induced proliferation-associated protein 1, Sipa-1, GTPase-activating protein Spa-1, p130 SPA-1, SIPA1, SPA1
Target/Specificity	SIPA1; At least three isoforms of SIPA1 are known to exist; this antibody will recognize all three isoforms. This antibody is specific for SIPA1 and will not recognize the other SIPA1 family of proteins.
Reconstitution & Storage	SIPA1 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	SIPA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SIPA1
Synonyms	SPA1
Function	GTPase activator for the nuclear Ras-related regulatory proteins Rap1 and Rap2 in vitro, converting them to the putatively inactive GDP-bound state (PubMed: 9346962). Affects cell cycle progression (By similarity).
Cellular Location	Nucleus. Cytoplasm, perinuclear region. Endomembrane system; Peripheral

membrane protein. Note=Mostly localized in the perinuclear membraneous region

Tissue Location

Expressed in fetal as well as in adult tissues. Expressed abundantly in the lymphoid tissues such as thymus, spleen and peripheral blood lymphocytes and also shows a significant expression in the spinal cord

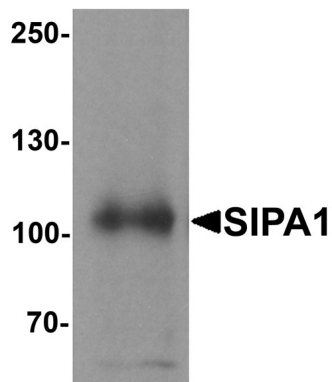
Background

SIPA1 Antibody: Signal-induced proliferation 1 (SIPA1) is a member of the SIPA1 family of RapGAPs, a family of mitogen-induced GTPase activating proteins. SIPA1 exhibits a specific GAP activity for Ras-related regulatory proteins Rap1 and Rap2, but not for Ran or other small GTPases. When abnormally or prematurely expressed, SIPA1 may also hamper mitogen-induced cell cycle progression and may increase metastases in human cancers.

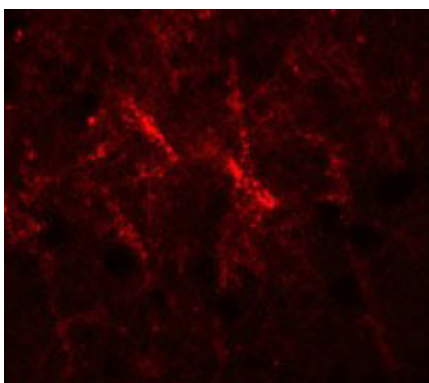
References

- Hattori M, Tsukamoto N, Nur-e-Kamal MS, et al. Molecular cloning of a novel mitogen-inducible nuclear protein with a Ran GTPase-activating domain that affects cell cycle progression. *Mol. Cell. Biol.* 1995; 15:551-60.
- Minato N and Hattori M. SPA-1 (Sipa1) and Rap signaling in leukemia and cancer metastasis. *Cancer Sci.* 2009; 100:17-23.
- Kurachi H, Wada Y, Tsukamoto N, et al. Human SPA-1 gene product selectively expressed in lymphoid tissues is a specific GTPase-activating protein for Rap1 and Rap2. Segregate expression profiles from a rap1GAP gene product. *J. Biol. Chem.* 1997; 272:28081-8.
- Ishida D, Kometani K, Yang H, et al. Myeloproliferative stem cell disorders by deregulated Rap1 activation in SPA-1-deficient mice. *Cancer Cell* 2003; 4:55-65.

Images



Western blot analysis of SIPA1 in human brain tissue lysate with SIPA1 antibody at 1 µg/mL.



Immunofluorescence of SIPA1 in human brain cells with SIPA1 antibody at 20 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.