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

Hax1a Antibody [9F3D11]

Catalog # ASC11991

Product Information

Application	WB, E
Primary Accession	O00165
Other Accession	NP_006109, 13435356
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	IgG3
Clone Names	9F3D11
Calculated MW	31621
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Hax1a antibody can be used for detection of Hax1A by Western blot at 1 - 2 g/mL.

Additional Information

Gene ID	10456
Other Names	HCLS1-associated protein X-1, HS1-associating protein X-1, HAX-1, HS1-binding protein 1, HSP1BP-1, HAX1, HS1BP1
Target/Specificity	HAX1;
Reconstitution & Storage	Hax1a monoclonal antibody can be stored at -20℃, stable for one year.
Precautions	Hax1a Antibody [9F3D11] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HAX1
Synonyms	HS1BP1
Function	Recruits the Arp2/3 complex to the cell cortex and regulates reorganization of the cortical actin cytoskeleton via its interaction with KCNC3 and the Arp2/3 complex (PubMed:26997484). Slows down the rate of inactivation of KCNC3 channels (PubMed:26997484). Promotes GNA13-mediated cell migration. Involved in the clathrin-mediated endocytosis pathway. May be involved in internalization of ABC transporters such as ABCB11. May inhibit CASP9 and CASP3. Promotes cell survival. May regulate intracellular calcium pools.
Cellular Location	Mitochondrion matrix. Endoplasmic reticulum Nucleus membrane. Cytoplasmic vesicle {ECO:0000250|UniProtKB:O35387}. Cytoplasm, cell

	cortex. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Sarcoplasmic reticulum {ECO:0000250|UniProtKB:Q7TSE9}. Cytoplasm, P-body [Isoform 3]: Cytoplasm. Nucleus Note=Predominantly cytoplasmic. Also detected in the nucleus when nuclear export is inhibited (in vitro). [Isoform 5]: Cytoplasm. Note=Predominantly cytoplasmic
Tissue Location	Ubiquitous. Up-regulated in oral cancers.

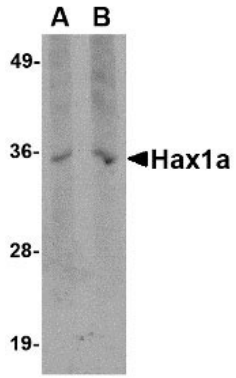
Background

Hax1a Monoclonal Antibody: The HS-1 associated protein X-1 (Hax1) was initially identified in a yeast two-hybrid assay on the basis of its ability to bind to the hemapoietic cell-specific protein 1 (HS-1). Hax1 possesses anti-apoptotic activity and is structurally related to Bcl-2 family members, including the presence of BH1- and BH2-like domains. It has recently been shown to interact with HIV viral protein R (Vpr), a protein required for viral pathogenesis of HIV and linked to T-cell apoptosis through activation of caspases 3 and 9. Other studies indicate that Hax1-mediated processing of HtrA2 (also known as Omi) by the mitochondrial protease PARL allows survival of lymphocytes and neurons when cytokines are limiting. At least four isoforms of Hax1 are known to exist. This antibody is expected to recognize the longest isoform (Hax1a) as well as the shortest.

References

Suzuki Y, Demoliere C, Kitamura D, et al. HAX-1, a novel intracellular protein, localized on mitochondria directly associates with HS1, a substrate of Src family tyrosine kinases. J. Immunol. 1997; 158:2736-44.
Sharp TV, Wang HW, Koumi A, et al. K15 protein of Kaposi's sarcoma-associated herpesvirus is latently expressed and binds to HAX-1, a protein with antiapoptotic function. J. Virol. 2002; 76:802-16.
Yedavalli VS, Shih HM, Chiang YP, et al. Human immunodeficiency virus type 1 Vpr interacts with antiapoptotic mitochondrial protein HAX-1. J. Virol. 2005; 79:13735-46.
Chao J-R, Parganas E, Boyd K, et al. Hax1-mediated processing of HtrA2 by Parl allows survival of lymphocytes and neurons. Nature 2008; 452:98-102.

Images



Western blot analysis of Hax1a in human brain tissue lysate with Hax1a antibody at (A) 1 and (B) 2 µg/mL.