# SANTA CRUZ BIOTECHNOLOGY, INC.

# HAX-1 (FL-279): sc-28268



#### BACKGROUND

The HS1BP1 gene encodes a novel protein designated HAX-1 (HS1-associated protein X-1 or HS1-binding protein protein X-1). HAX-1 has previously been shown to associate with HS1, a protein specifically expressed in cells of the hematopoietic lineage, and is thought to be involved in signal transduction in B cells and apoptosis. Though first identified as a protein that associates with HS1, recent data has also revealed interactions between HAX-1 and three disparate proteins: polycystin-2 (derived from the PKD2 gene), a protein linked to polycystic kidney disease; cortactin; and Epstein-Barr virus nuclear antigen leader protein (EBNA-LP). Additionally, HAX-1 has been identified as a binding partner to the C-terminus of K15 protein of Kaposi's sarcoma-associated herpesvirus, and K15 interacts with cellular HAX-1 in vitro and in vivo. Furthermore, HAX-1 co-localizes with K15 in the endoplasmic reticulum and mitochondria. Immuno-fluorescence experiments show that in most cells PKD2 and HAX-1 co-localize in the cell body, but in some cells PKD2 and HAX-1 also are sorted into cellular processes and lamellipodia. The HS1BP1 gene is expressed ubiquitously among tissues, and its protein is localized mainly in mitochondria, but also in endoplasmic reticulum and nuclear envelope in the cell.

#### CHROMOSOMAL LOCATION

Genetic locus: HAX1 (human) mapping to 1q21.3; Hax1 (mouse) mapping to 3 F1.

#### SOURCE

HAX-1 (FL-279) is a rabbit polyclonal antibody raised against amino acids 1-279 representing full length HAX-1 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

HAX-1 (FL-279) is recommended for detection of HAX-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

HAX-1 (FL-279) is also recommended for detection of HAX-1 in additional species, including bovine.

Suitable for use as control antibody for HAX-1 siRNA (h): sc-43365, HAX-1 siRNA (m): sc-43366, HAX-1 shRNA Plasmid (h): sc-43365-SH, HAX-1 shRNA Plasmid (m): sc-43366-SH, HAX-1 shRNA (h) Lentiviral Particles: sc-43365-V and HAX-1 shRNA (m) Lentiviral Particles: sc-43366-V.

Molecular Weight of HAX-1: 35 kDa.

Positive Controls: A-673 cell lysate: sc-2414, Saos-2 cell lysate: sc-2235 or MES-SA/Dx5 cell lysate: sc-2284.

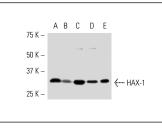
#### **RESEARCH USE**

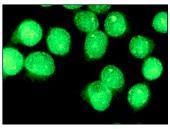
For research use only, not for use in diagnostic procedures.

## STORAGE

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

## DATA





HAX-1 (FL-279): sc-28268. Western blot analysis of HAX-1 expression in A-673 nuclear extract (A) and A-673 (B), MES-SA/Dx5 (C), SK-MEL-24 (D) and Saos-2 (E) whole cell lysates.

HAX-1 (FL-279): sc-28268. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear membrane localization.

#### SELECT PRODUCT CITATIONS

- 1. Ramsay, A.G., et al. 2007. HS1-associated protein X-1 regulates carcinoma cell migration and invasion via clathrin-mediated endocytosis of Integrin  $\alpha$ V/ $\beta$ 6. Cancer Res. 67: 5275-5284.
- Cheng, C.F., et al. 2008. Pravastatin attenuates carboplatin-induced cardiotoxicity via inhibition of oxidative stress associated apoptosis. Apoptosis 13: 883-894.
- Mekkawy, A.H., et al. 2010. Novel protein interactors of urokinase-type plasminogen activator receptor. Biochem. Biophys. Res. Commun. 399: 738-743.
- Mekkawy, A.H., et al. 2012. HAX1 augments cell proliferation, migration, adhesion, and invasion induced by urokinase-type plasminogen activator receptor. J. Oncol. 2012: 950749.

### PROTOCOLS

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

MONOS Satisfation Guaranteed Try HAX-1 (B-11): sc-166845, our highly recommended monoclonal alternative to HAX-1 (FL-279).