SANTA CRUZ BIOTECHNOLOGY, INC.

HAX-1 (E-20): sc-34273



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 (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HAX-1 of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34273 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HAX-1 (E-20) 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 μ g per 100-500 μ 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 (E-20) is also recommended for detection of HAX-1 in additional species, including equine, canine, bovine and porcine.

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 HAX-1 (h): 293T Lysate: sc-113132.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA





HAX-1 (E-20): sc-34273. Western blot analysis of HAX-1 expression in non-transfected: sc-117752 (**A**) and human HAX-1 transfected: sc-113132 (**B**) 293T whole cell lysates.

HAX-1 (E-20): sc-34273. Immunofluorescence staining of normal mouse intestine frozen section showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

 Peckl-Schmid, D., et al. 2010. HAX1 deficiency: impact on lymphopoiesis and B-cell development. Eur. J. Immunol. 40: 3161-3172.

STORAGE

Store at 4° C, **D0 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 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 (E-20).