SANTA CRUZ BIOTECHNOLOGY, INC.

HA-1 (K-14): sc-161069

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Major histocompatibility complex (MHC) molecules, which include human leukocyte antigens (HLAs), form an integral part of the immune response system. They are cell-surface receptors that bind foreign peptides and present them to cytotoxic T lymphocytes (CTLs). Minor histocompatibility antigens can form an immune response upon recognition by certain T cells when complexed with MHC molecules. HA-1 (minor histocompatibility protein HA-1), also known as HA-1, HLA-HA1 or HMHA1, is a 1,136 amino acid GTPase activator of Rho-type GTPases. Expressed in dendritic cells, epidermal Langerhans cells, hematopoietic cells, peripheral blood mononuclear cells and all leukemia and lymphoma cell lines, HA-1 is also found in various solid tissues and tumors. Highly phosphorylated, HA-1 contains one Rho-GAP domain, a single phorbolester/DAG-type zinc finger and is encoded by a gene located on human chromosome 19p13.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HMHA1 (human) mapping to 19p13.3; Hmha1 (mouse) mapping to 10 C1.

SOURCE

HA-1 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HA-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-161069 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HA-1 (K-14) is recommended for detection of HA-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for HA-1 siRNA (h): sc-97742, HA-1 siRNA (m): sc-145885, HA-1 shRNA Plasmid (h): sc-97742-SH, HA-1 shRNA Plasmid (m): sc-145885-SH, HA-1 shRNA (h) Lentiviral Particles: sc-97742-V and HA-1 shRNA (m) Lentiviral Particles: sc-145885-V.

Molecular Weight of HA-1: 125 kDa.

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) 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.

STORAGE

Store at 4° C, **DO 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.