

# HA-1 (N-15): sc-161070

## 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 phorbol-ester/DAG-type zinc finger and is encoded by a gene located on human chromosome 19p13.3.

## CHROMOSOMAL LOCATION

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

## SOURCE

HA-1 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus 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-161070 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

HA-1 (N-15) 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), immunoprecipitation [1-2 µg per 100-500 µg 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).

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.

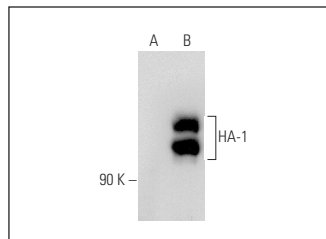
Molecular Weight of HA-1: 125 kDa.

Positive Controls: HA-1 (h): 293T Lysate: sc-116876 or HA-1 (m): 293T Lysate: sc-120698.

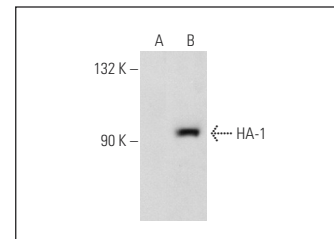
## RECOMMENDED SECONDARY REAGENTS

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



HA-1 (N-15): sc-161070. Western blot analysis of HA-1 expression in non-transfected: sc-117752 (A) and human HA-1 transfected: sc-116876 (B) 293T whole cell lysates.



HA-1 (N-15): sc-161070. Western blot analysis of HA-1 expression in non-transfected: sc-117752 (A) and mouse HA-1 transfected: sc-120698 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- Zhang, C.Z., et al. 2012. Interaction between ZBP-89 and p53 mutants and its contribution to effects of HDACi on hepatocellular carcinoma. *Cell Cycle* 11: 322-334.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **HA-1 (C-1): sc-393579**, our highly recommended monoclonal alternative to HA-1 (N-15).