HSPA14 (Y-14): sc-160435



The Power to Question

BACKGROUND

The heat shock proteins (HSPs) comprise a group of highly conserved, abundantly expressed proteins with diverse functions, including the assembly and sequestering of multi-protein complexes, the transportation of nascent poly-peptide chains across cellular membranes and the regulation of protein folding. HSPA14 (heat shock 70kDa protein 14), also known as HSP70-4 or HSP70L1, is a 509 amino acid novel HSP protein derived from human dendritic cells. Belonging to the heat shock protein 70 family, HSPA14 is thought to promote dendritic cell maturation. It is also suggested that HSPA14 stimulates secretion of the proinflammatory cytokines interleukin 12p70 (IL-12p70), IL-1 β , TNF α , and the chemokines IP-10, MIP-1 α , MIP-1 β and normal T cell expressed and secreted (RANTES).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HSPA14 (human) mapping to 10p13; Hspa14 (mouse) mapping to 2 A1.

SOURCE

HSPA14 (Y-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HSPA14 of human origin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-160435 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HSPA14 (Y-14) is recommended for detection of HSPA14 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); non cross-reactive with other HSPA family members.

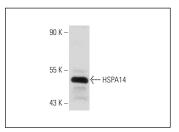
HSPA14 (Y-14) is also recommended for detection of HSPA14 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HSPA14 siRNA (h): sc-90528, HSPA14 siRNA (m): sc-146097, HSPA14 shRNA Plasmid (h): sc-90528-SH, HSPA14 shRNA Plasmid (m): sc-146097-SH, HSPA14 shRNA (h) Lentiviral Particles: sc-90528-V and HSPA14 shRNA (m) Lentiviral Particles: sc-146097-V.

Molecular Weight of HSPA14: 55 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224.

DATA



HSPA14 (Y-14): sc-160435. Western blot analysis of HSPA14 expression in Caki-1 whole cell lysate.

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.



Try **HSPA14 (G-9): sc-398208**, our highly recommended monoclonal alternative to HSPA14 (Y-14).