SANTA CRUZ BIOTECHNOLOGY, INC.

HARE (B-2): sc-398732

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

HARE (also designated stabilin-2) is the hyaluronan receptor for endocytosis, which mediates the endocytic clearance of hyaluronan (HA) and chondroitin sulfate from lymph fluid and blood. HARE is expressed in endothelial sinuses of liver, lymph nodes, spleen and bone marrow, and in specialized structures of the eye, heart, brain and kidney. Human and rat HARE each have two isoforms. HARE may serve to maintain tissue integrity by supporting extracellular matrix turnover or it may contribute to maintaining fluidity of bodily liquids by resorption of hyaluronan. When studies of clearance of hyaluronan (HA) and scavenger receptor ligands by liver sinusoidal endothelial cells (LSECs) were performed, stabilin-2 had a clear scavenging profile, stabilin-1 did not.

REFERENCES

1. Adachi, H., et al. 2002. FEEL-1, a novel scavenger receptor with *in vitro* bacteria-binding and angiogenesis-modulating activities. J. Biol. Chem. 277: 34264-34270.
2. Politz, O., et al. 2002. Stabilin-1 and -2 constitute a novel family of fasciclin-like hyaluronan receptor homologues. Biochem. J. 362: 155-164.
3. Zhou, B., et al. 2002. Molecular cloning and functional expression of the rat 175-kDa hyaluronan receptor for endocytosis. Mol. Biol. Cell 13: 2853-2868.
4. Falkowski, M., et al. 2003. Expression of stabilin-2, a novel fasciclin-like hyaluronan receptor protein, in murine sinusoidal endothelia, avascular tissues, and at solid/liquid interfaces. Histochem. Cell Biol. 120: 361-369.
5. Weigel, J.A., et al. 2003. A blocking antibody to the hyaluronan receptor for endocytosis (HARE) inhibits hyaluronan clearance by perfused liver. J. Biol. Chem. 278: 9808-9812.
6. Weigel, J.A., et al. 2003. Characterization of the recombinant rat 175-kDa hyaluronan receptor for endocytosis (HARE). J. Biol. Chem. 278: 42802-42811.
7. Zhou, B., et al. 2003. Purification and molecular identification of the human hyaluronan receptor for endocytosis. Glycobiology 13: 339-349.
8. Harris, E.N., et al. 2004. Endocytic function, glycosaminoglycan specificity, and antibody sensitivity of the recombinant human 190-kDa hyaluronan receptor for endocytosis (HARE). J. Biol. Chem. 279: 36201-36209.
9. Hansen, B., et al. 2005. Stabilin-1 and stabilin-2 are both directed into the early endocytic pathway in hepatic sinusoidal endothelium via interactions with clathrin/AP-2, independent of ligand binding. Exp. Cell Res. 303: 160-173.

CHROMOSOMAL LOCATION

Genetic locus: STAB2 (human) mapping to 12q23.3.

SOURCE

HARE (B-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 20-47 at the N-terminus of HARE of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398732 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

HARE (B-2) is recommended for detection of HARE of human origin by Western Blotting (starting dilution 1:100, 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 HARE siRNA (h): sc-105433, HARE shRNA Plasmid (h): sc-105433-SH and HARE shRNA (h) Lentiviral Particles: sc-105433-V.

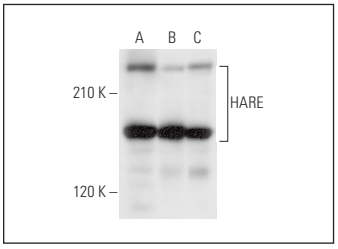
Molecular Weight of HARE isoforms: 190/315 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



HARE (B-2): sc-398732. Western blot analysis of HARE expression in Jurkat (**A**), HeLa (**B**) and K-562 (**C**) whole cell lysates.

STORAGE

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