BACKGROUND

HVEM (herpes virus entry mediator A), also known as TR2, ATAR, HVEA, LIGHTR or TNFRSF14 (tumor necrosis factor receptor superfamily, member 14), is a 283 amino acid single-pass type I membrane protein that is widely expressed, with highest expression in lung, spleen and thymus. A member of the TNF receptor superfamily, HVEM mediates the entry of herpes simplex virus (HSV) 1 and 2 into T lymphocytes by serving as an attachment site for the HSV envelope glycoprotein D (gD). HVEM acts as a receptor for two cellular ligands, secreted lymphotixin and LIGHT. A member of the TNF superfamily produced by activated T-cell, LIGHT is suggested to induce apoptosis and suppress tumor formation. Consisting of three TNFR-Cys repeats, HVEM plays a critical role in HSV pathogenesis. HVEM is encoded by a gene located on human chromosome 1p36.32, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: TNFRSF14 (human) mapping to 1p38.32.

PRODUCT

HVEM (h3): 293T Lysate represents a lysate of human HVEM transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

HVEM (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive HVEM antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

HVEM (D-5): sc-365971 is recommended as a positive control antibody for Western Blot analysis of enhanced human HVEM expression in HVEM transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA

HVEM (D-5): sc-365971. Western blot analysis of HVEM expression in non-transfected: sc-117752 (A) and human HVEM transfected sc-170825 (B) 293T whole cell lysates.

RESEARCH USE

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

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.