

CYTIP (h): 293T Lysate: sc-370987

BACKGROUND

CYTIP, also known as PSCDBP (pleckstrin homology, Sec7 and coiled-coil domains, binding protein), CASP or CYBR, is a cytoplasmic protein that is involved in lymphocytic cell adhesion. Expressed primarily in hematopoietic cells, CYTIP regulates the activity of cytohesin-1 (an integrin-activating protein involved in cell adhesion) by mediating its recruitment to the leukocyte membrane. Through its ability to bind cytohesin-1, CYTIP is able to sequester it to the cytoplasm, thereby preventing cytohesin-1 translocation to lymphocytes and interrupting the flow of information in the cell adhesion pathway. CYTIP can be recruited from the cytoplasm to the membrane by leukocyte integrins which interact with CYTIP through its PDZ domain. After membrane translocation, CYTIP can be re-located to the cytoplasm via exposure to a phorbol ester. Additionally, CYTIP associates with SNX27 (sorting nexin 27) and helps to coordinate trafficking and signaling complexes. Up-regulation of CYTIP is observed in maturing dendritic cells, suggesting a possible role in developmentally-controlled cell adhesion.

REFERENCES

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- Boehm, T., et al. 2003. Attenuation of cell adhesion in lymphocytes is regulated by CYTIP, a protein which mediates signal complex sequestration. *EMBO J.* 22: 1014-1024.
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- MacNeil, A.J., et al. 2007. Sorting nexin 27 interacts with the cytohesin associated scaffolding protein (CASP) in lymphocytes. *Biochem. Biophys. Res. Commun.* 359: 848-853.

CHROMOSOMAL LOCATION

Genetic locus: CYTIP (human) mapping to 2q24.1.

PRODUCT

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

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.

APPLICATIONS

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

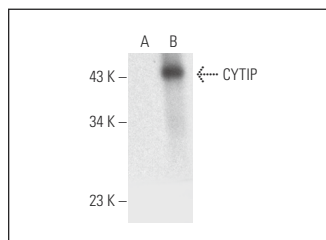
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

CYTIP (B-3): sc-514829 is recommended as a positive control antibody for Western Blot analysis of enhanced human CYTIP expression in CYTIP 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-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.

DATA



CYTIP (B-3): sc-514829. Western blot analysis of CYTIP expression in non-transfected: sc-117752 (A) and human CYTIP transfected: sc-370987 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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