

# SH-PTP2 (m2): 293T Lysate: sc-123530

## BACKGROUND

The steady state of protein tyrosyl phosphorylation in cells is regulated by the opposing action of tyrosine kinases and protein tyrosine phosphatases (PTPs). Several groups have independently identified a non-transmembrane PTP, designated SH-PTP1 (also known as PTP1C, HCP and SHP), which is primarily expressed in hematopoietic cells and characterized by the presence of two SH2 domains N-terminal to the PTP domain. SH2 domains generally mediate the association of regulatory molecules with specific phosphotyrosine-containing sites on autophosphorylated receptors, thereby controlling the initial interaction of receptors with these substrates. A second and much more widely expressed PTP with SH2 domains, SH-PTP2 (also designated PTP1D and Syp), has been identified. Strong sequence similarity between SH-PTP2 and the *Drosophila* gene corkscrew (CSW) and their similar patterns of expression suggest that SH-PTP2 is the human corkscrew homolog.

## REFERENCES

1. Chernoff, J., et al. 1990. Cloning of a cDNA for a major human protein-tyrosine-phosphatase. *Proc. Natl. Acad. Sci. USA* 87: 2735-2739.
2. Shen, S., et al. 1991. A protein-tyrosine phosphatase with sequence similarity to the SH2 domain of the protein-tyrosine kinases. *Nature* 352: 736-739.
3. Plutsky, J., et al. 1992. Isolation of a Src homology 2-containing tyrosine phosphatase. *Proc. Natl. Acad. Sci. USA* 89: 1123-1127.
4. Yi, T., et al. 1992. Protein tyrosine phosphatase containing SH2 domains: characterization, preferential expression in hema-topoietic cells, and localization to human chromosome 12p12-p13. *Mol. Cell. Biol.* 12: 836-846.
5. Matthews, R.J., et al. 1992. Characterization of hematopoietic intracellular protein tyrosine phosphatases: description of a phosphatase containing an SH2 domain and another enriched in proline-, glutamic acid-, serine-, and threonine-rich sequences. *Mol. Cell. Biol.* 12: 2396-2405.

## CHROMOSOMAL LOCATION

Genetic locus: Ptpn11 (mouse) mapping to 5 F.

## PRODUCT

SH-PTP2 (m2): 293T Lysate represents a lysate of mouse SH-PTP2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

SH-PTP2 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive SH-PTP2 antibodies. Recommended use: 10-20 µl per lane.

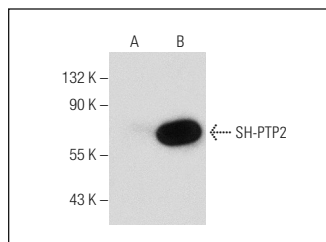
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

SH-PTP2 (H-2): sc-271550 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse SH-PTP2 expression in SH-PTP2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

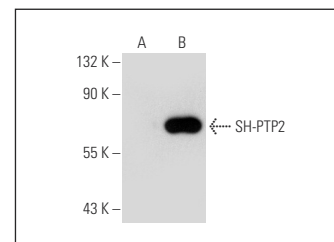
## RECOMMENDED SUPPORT REAGENTS

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



SH-PTP2 (H-2): sc-271550. Western blot analysis of SH-PTP2 expression in non-transfected: sc-117752 (A) and mouse SH-PTP2 transfected: sc-123530 (B) 293T whole cell lysates.



SH-PTP2 (D-1): sc-271106. Western blot analysis of SH-PTP2 expression in non-transfected: sc-117752 (A) and mouse SH-PTP2 transfected: sc-123530 (B) 293T whole cell lysates.

## 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.

## 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) for detailed protocols and support products.