

BDP1 (m): 293T Lysate: sc-118795

BACKGROUND

Protein tyrosine phosphorylation plays a key role in the regulation of several fundamental cellular processes, including cell growth, migration and differentiation. The regulation of phosphorylation is controlled by the opposing actions of protein tyrosine kinases and protein tyrosine phosphatase. BDP1 (brain derived phosphatase 1) is a member of the PEST protein tyrosine phosphatase family. The expression of BDP1 is not limited to the brain, but is also detectable in colon and several tumor-derived cell lines. BDP1 has been shown to differentially dephosphorylate autophosphorylated tyrosine kinases, such as SRC and EGFR, that are overexpressed in tumor tissues.

REFERENCES

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2. Walton, K.M. and Dixon, J.E. 1993. Protein tyrosine phosphatases. *Ann. Rev. Biochem.* 62: 101-120.
3. Kim, Y.W., Wang, H., Sures, I., Lammers, R., Martell, K.J. and Ullrich, A. 1996. Characterization of the PEST family protein tyrosine phosphatase BDP1. *Oncogene* 13: 2275-2279.
4. Van Vactor, D., O'Reilly, A.M. and Neel, B.G. 1998. Genetic analysis of protein tyrosine phosphatases. *Curr. Opin. Genet. Dev.* 8: 112-126.
5. Tamir, I. and Cambier, J.C. 1998. Antigen receptor signaling: integration of protein tyrosine kinase functions. *Oncogene* 17: 1353-1364.

CHROMOSOMAL LOCATION

Genetic locus: Ptpn18 (mouse) mapping to 1 B.

PRODUCT

BDP1 (m): 293T Lysate represents a lysate of mouse BDP1 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.

RESEARCH USE

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

APPLICATIONS

BDP1 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive BDP1 antibodies. Recommended use: 10-20 µl per lane.

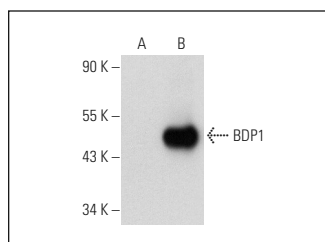
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

BDP1 (C-2): sc-166710 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse BDP1 expression in BDP1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

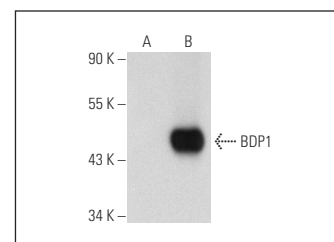
RECOMMENDED SUPPORT REAGENTS

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



BDP1 (C-2): sc-166710. Western blot analysis of BDP1 expression in non-transfected: sc-117752 (A) and mouse BDP1 transfected: sc-118795 (B) 293T whole cell lysates.



BDP1 (A-3): sc-166745. Western blot analysis of BDP1 expression in non-transfected: sc-117752 (A) and mouse BDP1 transfected: sc-118795 (B) 293T whole cell lysates.

PROTOCOLS

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