

Mac-2BP (h3): 293T Lysate: sc-158703

BACKGROUND

Mac-2BP (mac-2-binding protein), also known as LGALS3BP (lectin, galactoside-binding, soluble, 3 binding protein), 90K or BTBD17B, is a 585 amino acid protein that is secreted into the extracellular matrix and contains one SRCR domain, one BTB (POZ) domain and one BACK domain. Expressed ubiquitously, Mac-2BP exists as both a homodimer and a homomultimer and functions to promote Integrin-mediated cell adhesion, possibly playing a role in the stimulation of host defenses against tumor cells and viruses. Mac-2BP levels are elevated in HIV-infected hosts, further implicating Mac-2BP in immune system function. The gene encoding Mac-2BP maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

1. Iacobelli, S., et al. 1993. Purification and characterization of a 90 kDa protein released from human tumors and tumor cell lines. *FEBS Lett.* 319: 59-65.
2. Koths, K., et al. 1993. Cloning and characterization of a human Mac-2-binding protein, a new member of the superfamily defined by the macrophage scavenger receptor cysteine-rich domain. *J. Biol. Chem.* 268: 14245-14249.
3. Ullrich, A., et al. 1994. The secreted tumor-associated antigen 90K is a potent immune stimulator. *J. Biol. Chem.* 269: 18401-18407.
4. Calabrese, G., et al. 1995. The gene (LGALS3BP) encoding the serum protein 90K, associated with cancer and infection by the human immunodeficiency virus, maps at 17q25. *Cytogenet. Cell Genet.* 69: 223-225.
5. Brakebusch, C., et al. 1997. Expression of the 90K immunostimulator gene is controlled by a promoter with unique features. *J. Biol. Chem.* 272: 3674-3682.
6. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 600626. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Park, Y.P., et al. 2008. Induction of Mac-2BP by nerve growth factor is regulated by the PI3K/Akt/NFκB-dependent pathway in the HEK293 cell line. *BMB Rep.* 41: 784-789.
8. Becker, R., et al. 2008. Tumor stroma marker endosialin (Tem1) is a binding partner of metastasis-related protein Mac-2 BP/90K. *FASEB J.* 22: 3059-3067.
9. Weng, L.P., et al. 2008. Secretome-based identification of Mac-2 binding protein as a potential oral cancer marker involved in cell growth and motility. *J. Proteome Res.* 7: 3765-3775.

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.

CHROMOSOMAL LOCATION

Genetic locus: LGALS3BP (human) mapping to 17q25.3.

PRODUCT

Mac-2BP (h3): 293T Lysate represents a lysate of human Mac-2BP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Mac-2BP (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive Mac-2BP antibodies. Recommended use: 10-20 µl per lane.

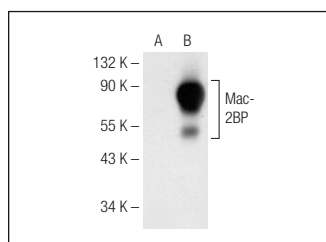
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Mac-2BP (E-8): sc-374541 is recommended as a positive control antibody for Western Blot analysis of enhanced human Mac-2BP expression in Mac-2BP 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



Mac-2BP (E-8): sc-374541. Western blot analysis of Mac-2BP expression in non-transfected: sc-117752 (A) and human Mac-2BP transfected: sc-158703 (B) 293T whole cell lysates.

RESEARCH USE

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