SANTA CRUZ BIOTECHNOLOGY, INC.

Mac-2BP (E-8): sc-374541

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

Genetic locus: LGALS3BP (human) mapping to 17q25.3; Lgals3bp (mouse) mapping to 11 E2.

SOURCE

Mac-2BP (E-8) is a mouse monoclonal antibody raised against amino acids 84-383 mapping within an internal region of Mac-2BP of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Mac-2BP (E-8) is available conjugated to agarose (sc-374541 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-374541 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374541 PE), fluorescein (sc-374541 FITC), Alexa Fluor® 488 (sc-374541 AF488), Alexa Fluor® 546 (sc-374541 AF546), Alexa Fluor® 594 (sc-374541 AF594) or Alexa Fluor® 647 (sc-374541 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374541 AF680) or Alexa Fluor® 790 (sc-374541 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Mac-2BP (E-8) is recommended for detection of Mac-2BP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Mac-2BP siRNA (h): sc-75722, Mac-2BP siRNA (m): sc-75723, Mac-2BP shRNA Plasmid (h): sc-75722-SH, Mac-2BP shRNA Plasmid (m): sc-75723-SH, Mac-2BP shRNA (h) Lentiviral Particles: sc-75722-V and Mac-2BP shRNA (m) Lentiviral Particles: sc-75723-V.

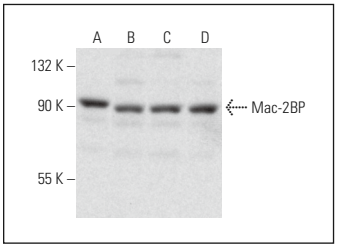
Molecular Weight of Mac-2BP: 90 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, RAW 264.7 whole cell lysate: sc-2211 or 3611-RF whole cell lysate: sc-2215.

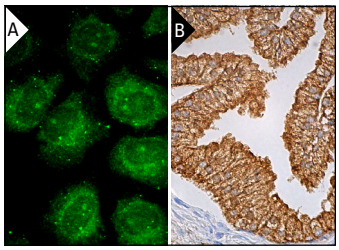
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Mac-2BP (E-8): sc-374541. Western blot analysis of Mac-2BP expression in COLO 320DM (**A**), NIH/3T3 (**B**), RAW 264.7 (**C**) and 3611-RF (**D**) whole cell lysates.



Mac-2BP (E-8): sc-374541. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and vesicle localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic and membrane staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

1. Zhang, Y., et al. 2017. Effect of intraoral mechanical stress application on the expression of a force-responsive prognostic marker associated with system disease progression. J. Dent. 57: 57-65.
2. Fukamachi, M., et al. 2018. Multiple coagulation factor deficiency protein 2 as a crucial component in metastasis of human oral cancer. Exp. Cell Res. 368: 119-125.
3. Hoshino, A., et al. 2020. Extracellular vesicle and particle biomarkers define multiple human cancers. Cell 182: 1044-1061.e18.
4. Song, Y., et al. 2021. Plasma exosomes from endometrial cancer patients contain LGALS3BP to promote endometrial cancer progression. Oncogene 40: 633-646.
5. Martínez-Greene, J.A., et al. 2021. Quantitative proteomic analysis of extracellular vesicle subgroups isolated by an optimized method combining polymer-based precipitation and size exclusion chromatography. J. Extracell. Vesicles 10: e12087.
6. Chen, Y., et al. 2021. Serum extracellular vesicles containing MIAT induces atrial fibrosis, inflammation and oxidative stress to promote atrial remodeling and atrial fibrillation via blockade of miR-485-5p-mediated CXCL10 inhibition. Clin. Transl. Med. 11: e482.
7. Hu, L., et al. 2023. Interaction network of extracellular vesicles building universal analysis via eye tears: iNEBULA. Sci. Adv. 9: eadg1137.
8. Zhu, Q., et al. 2023. Robust acute pancreatitis identification and diagnosis: RAPIDx. ACS Nano 17: 8564-8574.

RESEARCH USE

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