MyD88 (B-1): sc-136970



The Power to Question

BACKGROUND

Interleukin-1 (IL-1)-induced activation of the NF κ B pathway is mediated through the IL-1 receptor and the subsequent phosphorylation of IL-1 receptor-associated kinase (IRAK). The myeloid differentiation protein MyD88 was originally characterized as a protein upregulated in myeloleukemic cells following IL-6-induced growth arrest and terminal differentiation. MyD88 is now known to function as an adaptor protein for the association of IRAK with the IL-1 receptor. MyD88 is functionally homologous to the adaptor protein tube in the Toll signaling pathway of *Drosophilia*, and both proteins are members of the Toll/IL-1R superfamily. MyD88 contains a characteristic N-terminal death domain that is essential for NF κ B activation and an adjacent Toll/IL-1R homology domain (TIR domain). Collectively, these domains enable the protein-protein interactions of MyD88 with IRAK and the IL-1 receptor complex.

CHROMOSOMAL LOCATION

Genetic locus: MYD88 (human) mapping to 3p22.2.

SOURCE

MyD88 (B-1) is a mouse monoclonal antibody raised against amino acids 1-296 of MyD88 of human origin.

PRODUCT

Each vial contains 200 μg lgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MyD88 (B-1) is available conjugated to agarose (sc-136970 AC), 500 μg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-136970 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136970 PE), fluorescein (sc-136970 FITC), Alexa Fluor® 488 (sc-136970 AF488), Alexa Fluor® 546 (sc-136970 AF546), Alexa Fluor® 594 (sc-136970 AF594) or Alexa Fluor® 647 (sc-136970 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-136970 AF680) or Alexa Fluor® 790 (sc-136970 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

MyD88 (B-1) is recommended for detection of MyD88 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 MyD88 siRNA (h): sc-35986, MyD88 shRNA Plasmid (h): sc-35986-SH and MyD88 shRNA (h) Lentiviral Particles: sc-35986-V.

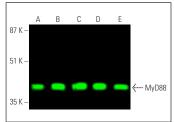
Molecular Weight of MyD88: 33 kDa.

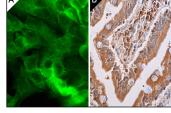
Positive Controls: Raji whole cell lysate: sc-364236, Jurkat whole cell lysate: sc-2204 or SK-BR-3 cell lysate: sc-2218.

STORAGE

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

DATA





MyD88 (B-1): sc-136970. Near-infrared western blot analysis of MyD88 expression in Raji (**A**), Jurkat (**B**), SK-BR-3 (**C**), THP-1 (**D**) and Hep G2 (E) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-lgGκ BP-CFL 680: sc-516180.

MyD88 (B-1): sc-136970. Immunofluorescence staining of formalin-fixed Hep G2 cells showing cytoplasmic and membrane localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human small intestine tissue showing cytoplasmic staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Kocic, G., et al. 2011. Circulating ribonucleic acids and metabolic stress parameters may reflect progression of autoimmune or inflammatory conditions in juvenile type 1 diabetes. ScientificWorldJournal 11: 1496-1508.
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- 3. Phelan, J.D., et al. 2018. A multiprotein supercomplex controlling oncogenic signalling in lymphoma. Nature 560: 387-391.
- Feng, Z., et al. 2019. Atractylodes macrocephala polysaccharides regulate the innate immunity of colorectal cancer cells by modulating the TLR4 signaling pathway. Onco Targets Ther. 12: 7111-7121.
- Chen, X.X., et al. 2019. Coculture with bone marrow-derived mesenchymal stem cells attenuates inflammation and apoptosis in lipopolysaccharidestimulated alveolar epithelial cells via enhanced secretion of keratinocyte growth factor and angiopoietin-1 modulating the Toll-like receptor-4 signal pathway. Mol. Med. Rep. 19: 1891-1902.
- Ju, H., et al. 2020. TLR4 activation leads to anti-EGFR therapy resistance in head and neck squamous cell carcinoma. Am. J. Cancer Res. 10: 454-472.
- Yang, L.T., et al. 2020. Restoration of Mal overcomes the defects of apoptosis in lung cancer cells. PLoS ONE 15: e0227634.
- 9. Lim, T.J.F., et al. 2020. Talin1 controls dendritic cell activation by regulating TLR complex assembly and signaling. J. Exp. Med. 217: e20191810.
- Wu, C.C., et al. 2020. β-funaltrexamine displayed anti-inflammatory and neuroprotective effects in cells and rat model of stroke. Int. J. Mol. Sci. 21: 3866.

RESEARCH USE

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