

Product Datasheet

MyD88 Inhibitor Peptide Set

NBP2-29328

Unit Size: 2 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

www.novusbio.com



technical@novusbio.com

Reviews: 3 Publications: 100

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP2-29328

Updated 10/23/2024 v.20.1

Earn rewards for product reviews and publications.

Submit a publication at www.novusbio.com/publications

Submit a review at www.novusbio.com/reviews/destination/NBP2-29328



NBP2-29328

MyD88 Inhibitor Peptide Set

Product Information	
Unit Size	2 mg
Concentration	Lyoph
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Reconstitution Instructions	Please contact technical support for detailed reconstitution instructions.
Buffer	Solubilize the peptides prior to use by making 5 mM PBS* stock solutions (please see Preparation of 5 mM Stock Solutions under Preparation Method).
Product Description	
Gene ID	4615
Gene Symbol	MYD88
Species	Human, Mouse, Rat, Bovine, Xenopus, Yeast, Zebrafish
Reactivity Notes	Yeast reactivity reported in scientific literature (PMID: 27870876).
Specificity/Sensitivity	The MyD88 Homodimerization inhibitory peptide contains a protein transduction (PTD) sequence (DRQIKIWFQNRRMKWKK) derived from antennapedia which renders the peptide cell permeable (Derossi et al, The third helix of the antennapedia homeodomain translocates through biological membranes. J Biol Chem. 269:10444-10450 (1994)] .The control peptide consists of only the PTD sequence.
Immunogen	Functions as a decoy by binding to the MyD88 TIR domain.
Preparation Method	<p>Preparation of 5 mM Stock Solutions PBS* is added directly to the vials to prepare the stock solutions. Note: Bring the solution to room temperature and quick spin the tubes before opening the caps. MyD88 Homodimerization Inhibitor Peptide: 1 mg of DRQIKIWFQNRRMKWKKRDVLPGT Add 64.4 ul of PBS* to the vial to make a 5 mM stock solution. Mix by vortexing. Aliquot and store at -20C or -80C. Avoid repeated freeze thawing.</p> <p>Control Peptide: 1 mg of DRQIKIWFQNRRMKWKK Add 84.8 ul PBS* to the vial. Mix by vortexing. Aliquot and store at -20C or -80C. Avoid repeated freeze thawing *Recipe for 1X PBS: 1. Dissolve the following in 800ml distilled H2O. - 8g of NaCl - 0.2g of KCl - 1.44g of Na2HPO4 - 0.24g of KH2PO4 2. Adjust pH to 7.5 with HCl. 3. Adjust volume to 1L with additional distilled H2O. 4. Sterilize by autoclaving</p>
Inhibitor Target	MyD88
Inhibitor Content	2 x 1.0mg: MyD88 Homodimerization Inhibitor peptide (lyophilized) DRQIKIWFQNRRMKWKKRDVLPGT (MyD88 homodimerization sequence: RDVLPGT). Molecular weight: 3100 2 x 1.0mg: Antennapedia Control peptide (lyophilized) DRQIKIWFQNRRMKWKK. Molecular weight: 2361 5mg size will contain 5mg of each peptide (MyD88 Homodimerization Inhibitor peptide and Antennapedia Control peptide).
Product Application Details	

Applications	ELISA, Flow Cytometry, Functional (Inhibition), Immunohistochemistry, In vitro assay, In vivo assay, Block/Neutralize, Binding Inhibition
Recommended Dilutions	Flow Cytometry reported in scientific literature (PMID 27870876), ELISA 1:100 - 1:2000. Use reported in scientific literature (PMID 23469306), Immunohistochemistry reported in scientific literature (PMID 28282921), In vitro assay reported in scientific literature (PMID 25810567), In vivo assay reported in scientific literature (PMID 24755282), Functional (Inhibition) reported in multiple pieces of scientific literature, Binding Inhibition reported in scientific literature (PMID 28302163), Block/Neutralize reported in scientific literature (PMID 24886588)
Application Notes	<p>Inhibition of MyD88 dependent TLR/IL-1R signaling activity by interfering with MyD88 homodimer formation.</p> <p>Inhibitory peptide at 100 uM concentration may be a starting point. However, useful concentration of peptide may vary depending on experimental condition and cell type. Incubate cells for 24 hr with peptides before stimulating with ligands.</p>



Publications

D Yuan, S Huang, E Berger, L Liu, N Gross, F Heinzmann, M Ringelhan, TO Connor, M Stadler, M Meister, J Weber, R Öllinger, N Simonavici, F Reisinger, D Hartmann, R Meyer, M Reich, M Seehawer, V Leone, B Höchst, D Wohlleber, S Jörs, M Prinz, D Spalding, U Protzer, T Luedde, L Terraccian, M Matter, T Longerich, P Knolle, T Ried, V Keitel, F Geisler, K Unger, E Cinnamon, E Pikarsky, N Hüser, RJ Davis, DF Tschaharga, R Rad, A Weber, L Zender, D Haller, M Heikenwald Kupffer Cell-Derived Tnf Triggers Cholangiocellular Tumorigenesis through JNK due to Chronic Mitochondrial Dysfunction and ROS Cancer Cell, 2017-06-12;31(6):771-789.e6. 2017-06-12 [PMID: 28609656]

Firmal P, Shah VK, Pant R, Chattopadhyay S. RING finger protein TOPORS modulates the expression of tumor suppressor SMAR1 in colorectal cancer via the TLR4-TRIF pathway Molecular Oncology 2022-04-01 [PMID: 34689394]

Makin RD, Apicella I, Dholkawala R et Al. Inflammasome activation aggravates choroidal neovascularization Angiogenesis 2024-09-24 [PMID: 39316206]

Sahanic S, Hilbe R, Dünser C et al. SARS-CoV-2 activates the TLR4/MyD88 pathway in human macrophages: A possible correlation with strong pro-inflammatory responses in severe COVID-19 Heliyon 2023-11-01 [PMID: 38034686]

Thapa HB, Kohl P, Zingl FG et al. Characterization of the Inflammatory Response Evoked by Bacterial Membrane Vesicles in Intestinal Cells Reveals an RIPK2-Dependent Activation by Enterotoxigenic Escherichia coli Vesicles Microbiology spectrum 2023-06-12 [PMID: 37306596] (Func-Inh)

Katab E, Kumar A, Steiger K et al. NF- κ B c-REL-OTUD4 axis regulates B-cell receptor in B-cell lymphoma bioRxiv 2023-05-08

Kwon O, Lee S Ishige okamura Attenuates Neuroinflammation and Cognitive Deficits in Mice Intracerebroventricularly Injected with LPS via Regulating TLR-4/MyD88-Dependent Pathways Antioxidants 2022-12-29 [PMID: 36670940]

Yao XP, Ye J, Feng T et al. Adaptor protein MyD88 confers the susceptibility to stress via amplifying immune danger signals Brain, behavior, and immunity 2022-12-07 [PMID: 36496170] (In Vivo)

Liao Y, Guo C, Wen A et al. Frankincense-Myrrh treatment alleviates neuropathic pain via the inhibition of neuroglia activation mediated by the TLR4/MyD88 pathway and TRPV1 signaling Phytomedicine : international journal of phytotherapy and phytopharmacology 2023-01-01 [PMID: 36379093] (In Vivo, Mouse)

jiang w, Luo Z, Fitting S et al. Chronic Cannabis Smoking-Enriched Oral Pathobiont Drives Behavioral Changes and Increases beta -Amyloid Protein Production in the Brain EBioMedicine 2021-11-26 [PMID: 34826801]

Jacobovitz MR, Rupp S, Voss PA Dinoflagellate symbionts escape vomocytosis by host cell immune suppression Nat Microbiol 2021-04-30 [PMID: 33927382]

Kim Y, Jo M, Schmidt J, et al. Enhanced Potency of GalNAc-conjugated Antisense Oligonucleotides in Hepatocellular Cancer Models Mol Ther 2019-07-16 [PMID: 31303442]

More publications at <http://www.novusbio.com/NBP2-29328>



Procedures

MSDS (NBP2-29328)

Hazard Information

Chemical Name: Non hazardous products

Chemical Formula: N/A

CAS Number: N/A

EEC-No: N/A

Hazard Identification

None

First Aid Measures

Eye Contact: None

Skin Contact: None

Inhalation: None

Ingestion: None

Accidental Release Measures

This product either does not contain hazardous constituents or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, 88/379/EEC, and 67/546/EEC.

Handling and Storage

Exposure Controls / Personal Protection

Other Precautions: None

Physical and Chemical Properties

Form: N/A

Color: N/A

Odor: N/A

Melting Point: N/A

Boiling Temperature: N/A

Density: N/A

Vapor Pressure: N/A

Solubility in Water: N/A

Flash Point: N/A

Explosion limits: N/A

Ignition Temperature: N/A





Novus Biologicals USA

10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada

21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NBP2-29328

NB100-56698PEP	MyD88 Antibody Blocking Peptide
210-TA-005	TNF-alpha [Unconjugated]
NB100-56698	MyD88 Antibody - BSA Free
M6000B-1	IL-6 [HRP]

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Inhibitors are guaranteed for 1 year from date of receipt.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP2-29328

Earn gift cards/discounts by submitting a publication using this product:
www.novusbio.com/publications

