Product Datasheet

MyD88 Inhibitor Peptide Set
NBP2-29328-5mg

Unit Size: 5 mg
Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

Reviews: 3  Publications: 74

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

Updated 9/3/2019 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
# NBP2-29328-5mg
MyD88 Inhibitor Peptide Set

## Product Information

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unit Size</td>
<td>5 mg</td>
</tr>
<tr>
<td>Concentration</td>
<td>Lyoph</td>
</tr>
<tr>
<td>Storage</td>
<td>Aliquot and store at -20°C or -80°C. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td>Reconstitution Instructions</td>
<td>Please contact technical support for detailed reconstitution instructions.</td>
</tr>
<tr>
<td>Buffer</td>
<td>Solubilize the peptides prior to use by making 5 mM PBS* stock solutions (please see Preparation of 5 mM Stock Solutions under Preparation Method).</td>
</tr>
</tbody>
</table>

## Product Description

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gene ID</td>
<td>4615</td>
</tr>
<tr>
<td>Gene Symbol</td>
<td>MYD88</td>
</tr>
<tr>
<td>Species</td>
<td>Human, Mouse, Rat, Xenopus, Yeast, Zebrafish</td>
</tr>
<tr>
<td>Reactivity Notes</td>
<td>Yeast reactivity reported in scientific literature (PMID: 27870876).</td>
</tr>
<tr>
<td>Immunogen</td>
<td>Functions as a decoy by binding to the MyD88 TIR domain.</td>
</tr>
</tbody>
</table>

## Preparation Method

**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 -20°C or -80°C. Avoid repeated freeze thawing.

- **Control Peptide:** 1 mg of DRQIKIWFQNRRMKWKK Add 84.8 ul PBS* to the vial. Mix by vortexing. Aliquot and store at -20°C or -80°C. 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

## Notes

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.

## 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

- **www.novusbio.com**
- **technical@novusbio.com**
Applications
ELISA, Flow Cytometry, Functional (Inhibition), Immunohistochemistry, In vitro assay, In vivo assay, Block/Neutralize, Binding Inhibition

Recommended Dilutions
Flow Cytometry, ELISA 1:100 - 1:2000, Immunohistochemistry, In vitro assay, In vivo assay, Functional (Inhibition), Binding Inhibition, Block/Neutralize

Application Notes
Inhibition of MyD88 dependent TLR/IL-1R signaling activity by interfering with MyD88 homodimer formation.

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. Use in Functional inhibition reported in multiple pieces of scientific literature Use in In vivo assay reported in scientific literature (PMID 24755282)
Use in blocking / neutralizing reported in scientific literature (PMID 24886588)
Use in In vitro assay reported in scientific literature (PMID 25810567) Use in ELISA reported in scientific literature (PMID 23469306). Use in FLOW cytometry reported in scientific literature (PMID 27870876). Use in Binding inhibition reported in scientific literature (PMID 28302163). Use in Immunohistochemistry reported in scientific literature (PMID 28282921).

Publications

Chang-Graham AL, Danhof HA, Engevik MA et al. Wnt5a is a TLR2/4-ligand that induces tolerance in human myeloid cells Commun Biol May 9 2019 12:00AM [PMID: 31098409] (InhibAct, Human)


Park SK, Jin SY, Yeon SH et al. Role of Toll-like receptor 9 signaling on activation of nasal polyp-derived fibroblasts and its association with nasal polyposis Int Forum Allergy Rhinol 2018 Jun 14 [PMID: 29901280]

Park SK, Jin SY, Yeon SH et al. Role of Toll-like receptor 9 signaling on activation of nasal polyp-derived fibroblasts and its association with nasal polyposis Int Forum Allergy Rhinol 2018 Jun 14 [PMID: 29901280]


Liu JT, Wu SX, Zhang H et al. Inhibition of MyD88 Signaling Skews Microglia/Macrophage Polarization and Attenuates Neuronal Apoptosis in the Hippocampus After Status Epilepticus in Mice Neurotherapeutics Aug 15 2018 12:00AM [PMID: 30112701] (In vivo, Mouse)

Zainal Abidin N. Studies on the intracellular life of the melioidosis pathogen Burkholderia pseudomallei. Thesis. 2018 (B/N, Mouse)


Gorelenkova Miller O, Mieyal JJ. Critical Roles of Glutaredoxin in Brain Cells - Implications for Parkinson's Disease Antioxid. Redox Signal. 2017 Nov 28 [PMID: 29183158] (Human)

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
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