Product Datasheet

Polyinosinic-polycytidylic acid
NBP2-25288-50mg

Unit Size: 50 mg

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Publications: 16

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Updated 8/18/2016 v.20.1

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NBP2-25288-50mg
Polyinosinic-polycytidylic acid

Product Information

<table>
<thead>
<tr>
<th>Unit Size</th>
<th>50 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concentration</td>
<td>Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance.</td>
</tr>
<tr>
<td>Storage</td>
<td>Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.</td>
</tr>
<tr>
<td>Buffer</td>
<td>Sterile low endotoxin PBS (&lt;0.05 EU/mg)</td>
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</tbody>
</table>

Product Description

| Species | Human, Mouse, Rat |
| Reactivity Notes | Human reactivity reported in scientific literature (PMID: 24693944) Mouse reactivity reported in scientific literature (PMID: 25647836). Rat reactivity reported in scientific literature (PMID: 26603372) |
| Immunogen | Polyinosinic-polycytidylic acid (Poly(I:C)) is a synthetic analog of double stranded RNA (dsRNA) that is produced during the replicative life cycle of a majority of viruses. Poly(I:C) is known to induce type-1 interferon (IFN) through TLR3. Poly(I:C) directly binds to TLR3. |
| Notes | Contents: 1 mg size in 100ul of sterile low endotoxin PBS (<0.05 EU/mg). 10 mg size in 1 ml of sterile low endotoxin PBS (<0.05 EU/mg). 50 mg size - 5 vials of 10mgs in 1 ml sterile low endotoxin PBS (<0.05 EU/mg). |

Product Application Details

| Applications | Functional, In vitro assay, In vivo assay, Ligand Activation |
| Recommended Dilutions | Functional, In vitro assay, In vivo assay, Ligand Activation |
| Application Notes | Used for activation of TLR3. Stimulation of TLR3 can be achieved with 10-100 ug/ml. Use in In vitro assay reported in scientific literature (PMID 24743304). Use in Ligand activation, and functional reported in scientific literature (PMID 25957979). Use in In vivo assay reported in scientific literature (PMID 26196739). Use in Ligand Activation reported in scientific literature (PMID 26503951) |

Images

Polyinosinic-polycytidylic acid [NBP2-25288] - 293T cells were cotransfected with pCMV/TLR3 plasmid and pNF-kB/SEAP plasmid using Lipofectamin 2000 (Life Technology). After 48 hrs of transfection, 10 ug/ml of Poly(I:C) was added. Cells were incubated at 37C for 24 hrs. Transfected cell supernatant was collected and analyzed using the NF-kB SEAPorter Assay kit.

Publications


Details:
Polyinosinic-polycytidylic acid (Poly-IC or Poly-ICLC ) was used for in vivo experiments in Rats at 1 mg/kg dose - Poly IC injected intraperitoneally after ischemia, while the vehicle group was injected i.p. with 0.9% saline. Poly-IC was used for in vitro experiments also - microglia were treated with vehicle or 1-25 ug/ml of poly-IC.


Details:
Polyinosinic-polycytidylic acid (Poly I:C) was used at 12-15ug/kg body weight in experiments involving generation of Notch1 knockout (N1KO) and CSL/RBP-Jk KO mice from Notch1fl/fl × Mx1 cre+/? (N1KO), Notch1fl/fl × Mx1 cre-/? mice (control), Rbp-jkfl/fl × Mx1 cre+/? mice (CSL/RBP-Jk KO), and Rbp-jkfl/fl X Mx1 cre-/? mice (control).


Details:
Polyinosinic-polycytidylic acid /Poly(I:C) [Imgenex: IMG-2203] was used for in-vivo pre-treatment of Mx1-cre TLXf/f and TLXf/f control mice that were further exposed to infection of Toxoplasma gondii (protozoan parasite). Poly IC was administered intraperitoneally every 3 days, five administrations total of 200 ug/mouse and the data of subsequent experiments may be seen in Figure 7.


Details:
Polyinosinic:polycytidylic acid / poly(I:C), TLR3 ligand (Imgenex IMG-2203-10) was used for in-vitro stimulation experiments involving human heparinized cord or adult blood Monocytes, peripheral blood dendritic cells (DCs) and monocyte-derived DCs (MoDCs). poly(I:C) was employed at 50 ug/mL concentration on Monocytes as well as on DCs and at 25 ug/mL on MoDCs. See full text for experimental details and results.


Arieta Kuksin C, Gonzalez-Perez G, Minter LM. CXCR4 expression on pathogenic T cells facilitates their bone marrow-infiltration in a mouse model of aplastic anemia Blood. 2015 Feb 03 [PMID: 25647836] (In vitro, Mouse)


Details:
Human granulocytes, Fig 1


Details:
Mice were injected with 12-15 ug/g body weight of Poly I: Poly C every other day for 5 days.

Details:
Bone marrow-derived macrophages, Fig 6b..Myd88/- bone marrow-derived macrophages were used in order to minimize induction of innate signaling pathways other than Tlr3. 1 ug total RNA or poly(I:C) was added to each chamber of a 24-well plate containing 1


Details:
Ligand activation (microglia), Fig 5b. polyinosinic-polycytidic acid (poly(I:C)) was from IMGENEX (San Diego, CA, USA).

More publications at http://www.novusbio.com/NBP2-25288
Limitations
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