Anti-Neuropilin 1/NRP1 Antibody

Catalog Number: PA1752

About NRP1

NRP1 (Neuropilin 1) also known as NP1, NRP, BDCA4 or VEGF165R, is a membrane-bound coreceptor to a tyrosine kinase receptor for both vascular endothelial growth factor (VEGF) and semaphorin (see SEMA3A) family members. NRP1 plays versatile roles in angiogenesis, axon guidance, cell survival, migration, and invasion. By somatic cell hybrid analysis, the NRP1 gene was mapped to chromosome 10. They localized the NRP1 gene to 10p12 using radiation hybrid mapping. Sulfation of the glucosamine-O-6 and iduronic acid-O-2 groups of heparin potentiated PGF2 binding to NRP1. NRP1 also bound PGF1 with lower affinity. NRP1-mediated interactions are a necessary element in the initiation of the primary immune response and offer another example, like that of agrin, of a molecule shared by neurologic and immunologic synapses. After T-cell contact with DC, T-cell NRP1 colocalized with CD3 in the immunologic synapse and, sometimes, also at the opposite pole of the T cell. Soluble NRP1 interacts in a homophilic fashion with NRP1 on both DC and T cells, and this binding can be inhibited by blocking antibodies to NRP1. Furthermore, selective NRP1 inhibition in this model suppressed neovascular formation substantially.

Overview

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Anti-Neuropilin 1/NRP1 Antibody</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactive Species</td>
<td>Human, Mouse, Rat</td>
</tr>
<tr>
<td>Description</td>
<td>Rabbit IgG polyclonal antibody for Neuropilin-1(NRP1) detection. Tested with WB in Human;Mouse;Rat.</td>
</tr>
<tr>
<td>Conjugate</td>
<td>No</td>
</tr>
<tr>
<td>Application</td>
<td>WB</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Formulation</td>
<td>Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.</td>
</tr>
<tr>
<td>Storage Instructions</td>
<td>At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.</td>
</tr>
<tr>
<td>Host</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Uniprot ID</td>
<td>O14786</td>
</tr>
</tbody>
</table>

Technical Details

| Immunogen             | A synthetic peptide corresponding to a sequence in the middle region of human Neuropilin 1(211-230aa LEIWDGFPDVPGHYRCGQ), different from the related rat and mouse sequences |
### Predicted Reactive Species
- Hamster

### Recommended Detection Systems
- Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.

### Cross Reactivity
- No cross reactivity with other proteins

### Isotype
- N/A

### Form
- Lyophilized

### Concentration
- Add 0.2ml of distilled water will yield a concentration of 500μg/ml.

### Reconstitution
- Add 0.2ml of distilled water will yield a concentration of 500μg/ml.

### Purification
- Immunogen affinity purified.

### Suggested Dilutions
- Western blot, 0.1-0.5μg/ml, Human, Rat, Mouse

For protocols please visit [https://www.bosterbio.com/protocol-and-troubleshooting/](https://www.bosterbio.com/protocol-and-troubleshooting/)

---

### Anti-Neuropilin 1/NRP1 Antibody (PA1752) Images

![Anti-Neuropilin 1 antibody, PA1752, Western blotting](image)

Lane 1: HELA Cell Lysate
Lane 2: MM231 Cell Lysate

---

### Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a $20 Amazon giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.