**Species Reactivity**
Human

**Specificity**
Detects human EDNRB in direct ELISAs and Western blots.

**Source**
Polyclonal Sheep IgG

**Purification**
Antigen Affinity-purified

**Immunogen**
E. coli-derived recombinant human EDNRB Glu27-Lys101
Accession # P24530

**Formulation**
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.
*Small pack size (SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**APPLICATIONS**
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th></th>
<th>Recommended Concentration</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Western Blot</td>
<td>1 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>Flow Cytometry</td>
<td>2.5 μg/10⁶ cells</td>
<td>See Below</td>
</tr>
<tr>
<td>Immunocytochemistry</td>
<td>5-15 μg/mL</td>
<td>See Below</td>
</tr>
<tr>
<td>CyTOF-ready</td>
<td></td>
<td>Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.</td>
</tr>
</tbody>
</table>

**DATA**

**Western Blot**
Detection of Human EDNRB/Endothelin R Type B by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line, A172 human glioblastoma cell line, and Raj human Burkitt's lymphoma cell line. PVDF membrane was probed with 1 μg/mL of Sheep Anti-Human EDNRB/Endothelin R Type B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4496) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for EDNRB/Endothelin R Type B at approximately 38 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

**Flow Cytometry**
Detection of EDNRB/Endothelin R Type B in A172 Human Cell Line by Flow Cytometry. A172 human glioblastoma cell line was stained with Human EDNRB/Endothelin R Type B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4496, filled histogram) or isotype control antibody (Catalog # 5-001-A, open histogram), followed by NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # NL010).

**Immunocytochemistry**
EDNRB/Endothelin R Type B in A172 Human Cell Line. EDNRB/Endothelin R Type B was detected in immersion fixed A172 human glioblastoma cell line using 10 μg/mL Sheep Anti-Human EDNRB/Endothelin R Type B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4496) for 3 hours at room temperature. Cells were stained with the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.
### PREPARATION AND STORAGE

<table>
<thead>
<tr>
<th><strong>Reconstitution</strong></th>
<th>Reconstitute at 0.2 mg/mL in sterile PBS.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Shipping</strong></td>
<td>The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. <em>Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C</em></td>
</tr>
</tbody>
</table>
| **Stability & Storage** | Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
- 12 months from date of receipt, -20 to -70 °C as supplied.  
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
- 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

### BACKGROUND

EDNRB (Endothelin B Receptor) is a member of the beta-family of rhodopsin receptors. It binds endothelin 1, 2, and 3 and is found on endothelial cells where it mediates vasodilation. Mature human EDNRB is a 7-transmembrane glycoprotein that is 416 amino acids (aa) in length. It contains a 75 aa N-terminal extracellular region (aa 27-101), and a 44 aa C-terminal cytoplasmic domain. There are three EDNRB variants that affect aa 27-101. One shows a 90 aa N-terminal extension, a second shows the same 90 aa N-terminal substitution coupled with a deletion of aa 268-398, and a third shows proteolytic cleavage between Arg64-Ser65. Over aa 27-101, human EDNRB shares 67% and 97% aa sequence identity with mouse and canine EDNRB, respectively.