

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human EDNRB in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -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 as a 0.2 µm filtered solution in PBS.

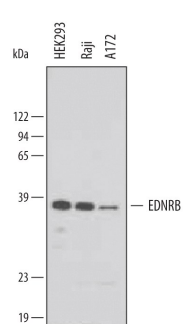
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunocytochemistry	5-15 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

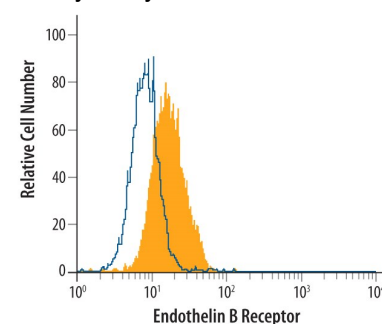
DATA

Western Blot



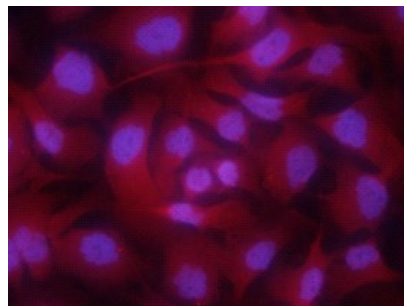
Detection of Human EDNRB/Endothelin R Type B by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line, A172 human glioblastoma cell line, and Raji human Burkitt's lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human EDNRB/Endothelin R Type B Antigen 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

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 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.