

Anti-EDNRB Antibody Picoband™ (monoclonal, 15C3)

Catalog # ABO14858

Product Information

Application	WB
Primary Accession	P24530
Host	Mouse
Isotype	Mouse IgG2b
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-EDNRB Antibody Picoband™ (monoclonal, 15C3) . Tested in WB applications. This antibody reacts with Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

Additional Information

Gene ID	1910
Other Names	Endothelin receptor type B, ET-B, ET-BR, Endothelin receptor non-selective type, EDNRB (HGNC:3180), ETRB
Calculated MW	49644
Application Details	Western blot, 0.1-0.5 µg/ml
Subcellular Localization	Cell membrane. Multi-pass membrane protein.
Tissue Specificity	Expressed in placental stem villi vessels, but not in cultured placental villi smooth muscle cells.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Clone Names	Clone: 15C3
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human EDNRB, different from the related mouse and rat sequences by one amino acid.
Cross Reactivity	No cross-reactivity with other proteins.
Storage	Store at -20 °C for one year from date of receipt. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for six months. Avoid repeated freeze-thaw cycles.

Protein Information

Name	EDNRB (HGNC:3180)
Synonyms	ETRB
Function	Non-specific receptor for endothelin 1, 2, and 3. Mediates its action by association with G proteins that activate a phosphatidylinositol-calcium second messenger system.
Cellular Location	Cell membrane; Multi-pass membrane protein. Note=internalized after activation by endothelins.
Tissue Location	Expressed in placental stem villi vessels, but not in cultured placental villi smooth muscle cells

Background

Endothelin receptor type B, also known as ETB is a protein that in humans is encoded by the EDNRB gene. The protein encoded by this gene is a G protein-coupled receptor which activates a phosphatidylinositol-calcium second messenger system. Its ligand, endothelin, consists of a family of three potent vasoactive peptides: ET1, ET2, and ET3. Studies suggest that the multigenic disorder, Hirschsprung disease type 2, is due to mutations in the endothelin receptor type B gene. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

Images

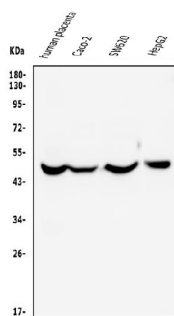


Figure 1. Western blot analysis of EDNRB using anti-EDNRB antibody (M01041-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,
Lane 2: human CACO-2 whole cell lysates,
Lane 3: human SW620 whole cell lysates,
Lane 4: human HepG2 whole cell lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-EDNRB antigen affinity purified monoclonal antibody (Catalog # M01041-1) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for EDNRB at approximately 45KD. The expected band size for EDNRB is at 45KD.