

ETAR (N-15): sc-21193

BACKGROUND

Endothelin receptor A (ETAR), also known as EDNRA, ET1 receptor, ETA, EDN1 and ET-AR, is a member of the guanine-binding regulatory protein-coupled receptor family. ETAR binds endothelins and has the highest affinity for its ligand, ET1, as compared to the ETBR receptor. Both ET receptors, ETAR and ETBR, are activated by ET1, which results in inhibition of active lens sodium-potassium transport. Activation of the ET receptors also causes an increase in cytoplasmic calcium concentration in cultured lens epithelial cells. In addition, ETAR induces arachidonic acid accumulation. ETAR has seven hydrophobic transmembrane domains and is expressed in aorta, lung, atrium, kidney, placenta and prostate. Specifically, placental vascular smooth muscle cells (PVSMSs) exclusively express ETAR.

CHROMOSOMAL LOCATION

Genetic locus: EDNRA (human) mapping to 4q31.22.

SOURCE

ETAR (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ETAR of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-21193 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures

APPLICATIONS

ETAR (N-15) is recommended for detection of ETAR of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ETAR (N-15) is also recommended for detection of ETAR in additional species, including bovine.

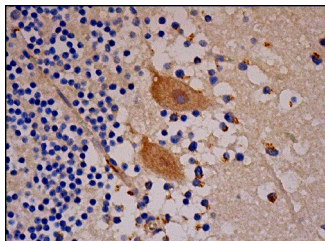
Suitable for use as control antibody for ETAR siRNA (h): sc-39960, ETAR shRNA Plasmid (h): sc-39960-SH and ETAR shRNA (h) Lentiviral Particles: sc-39960-V.

Molecular Weight of ETAR: 69 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



ETAR (N-15): sc-21193. Immunoperoxidase staining of formalin fixed, paraffin-embedded human cerebellum tissue showing cytoplasmic staining of Purkinje cells and cells in molecular layer.

SELECT PRODUCT CITATIONS

- Höltke, C., et al. 2007. A fluorescent photoprobe for the imaging of endothelin receptors. *Bioconj. Chem.* 18: 685-694.
- de Beer, V.J., et al. 2008. Integrative control of coronary resistance vessel tone by endothelin and angiotensin II is altered in swine with a recent myocardial infarction. *Am. J. Physiol. Heart Circ. Physiol.* 294: H2069-H2077.
- Henno, P., et al. 2009. Pulmonary vascular dysfunction in end-stage cystic fibrosis: role of NFκB and endothelin-1. *Eur. Respir. J.* 34: 1329-1337.
- Nilsson, M.C., et al. 2010. Distant effects of nitric oxide inhalation in endotoxemic pigs. *Crit. Care Med.* 38: 242-248.
- van den Heuvel, M., et al. 2012. Coronary microvascular dysfunction in a porcine model of early atherosclerosis and diabetes. *Am. J. Physiol. Heart Circ. Physiol.* 302: H85-H94.
- Liu, B., et al. 2014. Endothelin A receptor antagonism enhances inhibitory effects of anti-ganglioside GD2 monoclonal antibody on invasiveness and viability of human osteosarcoma cells. *PLoS ONE* 9: e93576.

MONOS
Satisfaction
Guaranteed

Try **ETAR (16): sc-135902**, our highly recommended monoclonal alternative to ETAR (N-15).