

ETAR (16): sc-135902

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.

REFERENCES

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- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 131243. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- LocusLink Report (LocusID: 1909). <http://www.ncbi.nlm.nih.gov/LocusLink/>

CHROMOSOMAL LOCATION

Genetic locus: EDNRA (human) mapping to 4q31.22; Ednra (mouse) mapping to 8 C1.

SOURCE

ETAR (16) is a mouse monoclonal antibody raised against amino acids 230-352 of ETAR of rat origin.

PRODUCT

Each vial contains 200 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

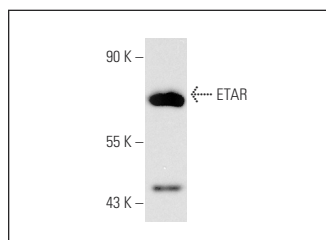
ETAR (16) is recommended for detection of ETAR of mouse, rat, human and *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for ETAR siRNA (h): sc-39960, ETAR siRNA (m): sc-39961, ETAR siRNA (r): sc-270097, ETAR shRNA Plasmid (h): sc-39960-SH, ETAR shRNA Plasmid (m): sc-39961-SH, ETAR shRNA Plasmid (r): sc-270097-SH, ETAR shRNA (h) Lentiviral Particles: sc-39960-V, ETAR shRNA (m) Lentiviral Particles: sc-39961-V and ETAR shRNA (r) Lentiviral Particles: sc-270097-V.

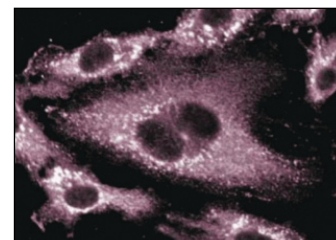
Molecular Weight of ETAR: 69 kDa.

Positive Controls: rat testis extract: sc-2400, mouse heart extract: sc-2254 or mouse lung extract: sc-2390.

DATA



ETAR (16): sc-135902. Western blot analysis of ETAR expression in rat testis tissue extract.



ETAR (16): sc-135902. Immunofluorescence staining of human endothelial cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Li, Y., Zhong, C., Liu, D., Yu, W., Chen, W., Wang, Y., Shi, S. and Yuan, Y. 2018. Evidence for Kaposi sarcoma originating from mesenchymal stem cell through KSHV-induced mesenchymal-to-endothelial transition. *Cancer Res.* 78: 230-245.
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- Gupta, S., Prajapati, A., Gulati, M., Gautam, S.K., Kumar, S., Dalal, V., Talmon, G.A., Rachagani, S. and Jain, M. 2020. Irreversible and sustained upregulation of endothelin axis during oncogene-associated pancreatic inflammation and cancer. *Neoplasia* 22: 98-110.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.