



Polyclonal Anti-Endothelin Receptor B, **EDNR-B** (Sephacose Bead Conjugate)

Catalogue No. PA1031-S

Lot No. 10E02

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human. No cross reactivity with other proteins.

Recommended application

(Immunoprecipitation(IP))

Immunogen

A A synthetic peptide corresponding to a sequence at the middle region of human EDNR-B, identical to the related rat sequence.

Purification

Immunogen affinity purified.

Formulation

50% slurry in PBS pH 7.2 with 0.01mg NaN₃a₃ preservative.

Storage

Store at 4°C for frequent use.

Description:

This Antagene antibody is immobilized via covalent binding of primary amino groups to N-hydroxysuccinimide (NHS)-activated sephacose beads. It is useful for immunoprecipitation assays

BACKGROUND

Endothelin Receptor B (EDNR-B), also called endothelin receptor, nonselective type (ETB, ETRB). It is a G-protein-coupled receptor with seven transmembrane domains which is required for the development of melanocytes and enteric neurons and migration of melanoblasts and enteric neuroblasts. The EDNRB gene spans 24 kilobases and consists of seven exons and six introns. This gene was expressed in human glaucomatous optic nerves and mapped to 13q22. The cDNA fragment for horse EDNRB contained a 1329 bp open reading frame which encoded 443 amino acid residues. The predicted amino acid sequence was 89, 91 and 85% identical to human, bovine and mouse as well as rat EDNRB respectively, but only 55% identical to the human, bovine and rat endothelin A receptor (EDNRA). EDNRB plays an essential role in the normal development of two neural crest-derived cell lineages, epidermal melanocytes and enteric neurons in three mammalian species--humans, mice, and rats. The EDNRB-deficient rat may also prove valuable in defining the postnatal physiologic role of this receptor.

REFERENCE

1. Shin, M. K.; Levorse, J. M.; Ingram, R. S.; Tilghman, S. M. : The temporal requirement for endothelin receptor-B signalling during neural crest development. *Nature* 402: 496-501, 1999.
2. Arai, H.; Nakao, K.; Takaya, K.; Hosoda, K.; Ogawa, Y.; Nakanishi, S.; Imura, H. : The human endothelin-B receptor gene: structural organization and chromosomal assignment. *J. Biol. Chem.* 268: 3463-3470, 1993.
3. Yang, G. C.; Croaker, D.; Zhang, A. L.; Manglick, P.; Cartmill, T.; Cass, D. : A dinucleotide mutation in the endothelin-B receptor gene is associated with lethal white foal syndrome (LWFS); a horse variant of Hirschsprung disease (HSCR). *Hum. Molec. Genet.* 7: 1047-1052, 1998.
4. Garipey, C. E.; Cass, D. T.; Yanagisawa, M. : Null mutation of endothelin receptor type B gene in spotting lethal rats causes aganglionic megacolon and white coat color. *Proc. Nat. Acad. Sci.* 93: 867-872, 1996.

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Contact: Antagene, Inc. | Tel: 1 (866) 964-2589 | Fax: 1 (888) 225-1868 | Email: Info@antageneinc.com