

Endothelin-B Receptor Monoclonal Antibody (8Z11)

Product Specifications	
Catalog Number:	905-637
Host:	Mouse
Species Reactivity:	Human, others not tested
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB: 2 - 5 µg/mL IP: 2 - 5 µg/mL IHC: 5 µg/mL <i>Antigen unmasking by heat treatment with 10mM citrate buffer, pH 5.0, is recommended for paraffin-embedded tissue.</i>
Concentration:	Reconstitute with 1 mL distilled water for a concentration of 100 µg/mL.
Format:	Lyophilized in PBS containing 1% BSA and 0.05% sodium azide
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
Immunogen:	ET-1 bound recombinant human 6hN-ETBR
Related Products:	
900-020	Endothelin-1 EIA Kit

Background:

Endothelins are vasoactive peptides that exist in three forms (ET-1, ET-2, and ET-3), and function in the maintenance of vascular tone via two identified seven transmembrane-spanning domain-containing G protein-coupled receptors, endothelin A (ET_A) and endothelin B (ET_B)¹. The human ET_B receptor is primarily expressed in endothelial cells lining the vessel walls of the lungs, heart, and brain, and its stimulation generally results in transient vasodilation²⁻⁴. Activation of ET_B receptors can be stimulated by binding of ET-1, ET-2, or ET-3, triggering the release of vasorelaxive factors such as nitric oxide (NO) and prostanoids from endothelial cells⁵. ET_B stimulation primarily induces coupling of G proteins of the G_i and G_{q/11} families, activating enzyme signaling systems including phospholipases C, A₂, and D⁶.

References:

1. Yanagisawa, M., *et al.* (1988) *Nature* **332**, 411-415.
2. Molenaar, P., *et al.* (1993) *Circ Res.* **72**, 526-538.
3. Arai, H., *et al.* (1990) *Nature* **348**, 730-732.
4. Sakurai, T., *et al.* (1990) *Nature* **348**, 732-735.
5. Warner, T.D., *et al.* (1989) *Eur J Pharmacol.* **159**, 325-326.
6. Takigawa, M., *et al.* (1995) *Eur J Biochem.* **228**, 102-108.