

**MULTISCREEN™ STABLE CELL LINE  
HUMAN RECOMBINANT ET<sub>B</sub> RECEPTOR**

**Data sheet**

**PRODUCT INFORMATION**

**Catalog Number:** C1217-1

**Lot Number:** C1217-1-092512

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** CHO-K1

**Transfection:** Full-length Human EDNRB cDNA (GenBank Accession Number NM\_000115) with FLAG-tag sequence at the N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

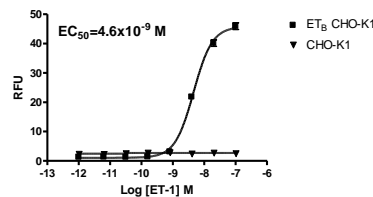
**Propagation Medium:** DME/F12, 10% FBS, 10  $\mu$ g/mL puromycin

**Stability:** In Progress

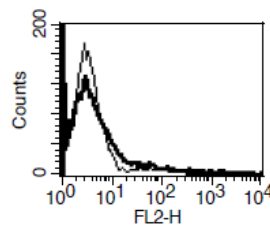
**Background:** Endothelin is a hormone produced predominantly by endothelial cells that have been recognized to play a significant role in the development of several cardiovascular disease states. ET<sub>B</sub> is mainly expressed in vascular endothelial and epithelial tissues as well as by smooth muscle cells. ET<sub>B</sub> activation of smooth muscle cells results in vasoconstriction, whereas ET<sub>B</sub> activation on vascular endothelium causes vasodilation through the release of nitric oxide. ET<sub>B</sub> has also been found to lower blood pressure through natriuresis and diuresis, and to release prostaglandins. In the kidney, ET<sub>B</sub> also serves to clear endothelins from circulation by receptor-mediated endocytosis and subsequent lysosomal degradation. Mutations in the ET<sub>B</sub> gene have been linked to Waardenburg syndrome, as well as Hirschsprung disease type 2.

**Application:** Functional assays

**Figure 1**



**Figure 2**



**Figure 1.** Dose-dependent stimulation of calcium flux upon treatment with ligand, monitored with FlexStation. **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

**References:**

Frommer, KW *et al.* (2008) Expression and function of ET<sub>A</sub> and ET<sub>B</sub> receptors in SSc. *Rheumatology* 47 (Suppl 5): v27-v28.

Sato-Jin, K *et al.* (2008) Epistatic connections between microphthalmia-associated transcription factor and endothelin signaling in Waardenburg syndrome and other pigmentary disorders. *FASEB J.* 22(4):1155-68.

Tanaka, H *et al.* (1998) Novel mutations of the endothelin B receptor gene in patients with Hirschsprung's disease and their characterization. *J. Biol. Chem.* 273(18):11378-83.

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