MULTISCREEN™ STABLE CELL LINE
HUMAN RECOMBINANT PTH2 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: H1302

Lot Number: H1302-023006

Quantity: 1 vial (2 x 10^6) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human PTH2 cDNA (GenBank Accession Number NM_005048) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS, 1 μg/mL puromycin

Stability: Stable after minimum of 2 months continuous growth

Background: The parathyroid hormone (PTH) receptor type 2 (PTHR2) is a receptor for PTH and tuberoinfundibular peptide TIP39. Unlike the PTH1 receptor, the PTH2 receptor has extreme low affinity for PTH-related peptide PTHrP. PTH2 receptor expression is high in the CNS, where it is concentrated in limbic, hypothalamic, and sensory areas, especially hypothalamic periventricular neurons, nerve terminals in the median eminence, superficial layers of the spinal cord dorsal horn, and the caudal part of the sensory trigeminal nucleus. Peripheral expression in pancreatic islet somatostatin cells is most dramatic. PTHR2 may be functionally involved in pituitary and pancreatic hormone release and pain perception.

Application: Functional assays

Figure 1

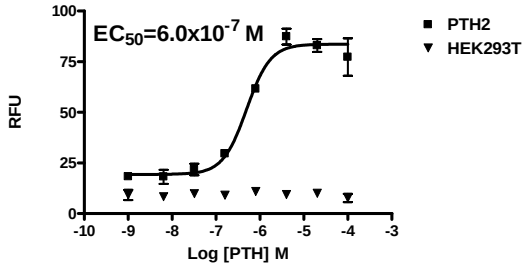

Figure 2

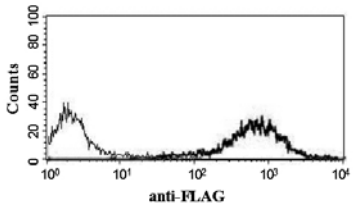

Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, monitored with FlexStation. **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Bisello *et al.* (2004) Agonist-specific regulation of parathyroid hormone (PTH) receptor type 2 activity: structural and functional analysis of PTH- and tuberoinfundibular peptide (TIP) 39-stimulated desensitization and internalization. *Mol Endocrinol* 18:1486-1498.

Usdin *et al.* (2002) The parathyroid hormone 2 (PTH2) receptor. *Receptors Channels* 8:211-218.

FOR RESEARCH USE ONLY.

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