

MULTISCREENTM STABLE CELL LINE HUMAN RECOMBINANT BB1 RECEPTOR

PRODUCT INFORMATION

Catalog Number: C1211

Lot Number: C1211-110409

Quantity: 1 vial (2 x 106) frozen cells

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T

Transfection: Expression vector containing full-length human NMBR cDNA (GenBank Accession Number NM_002511.1) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

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

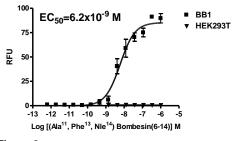
Stability: Stable after minimum of two months continuous growth



Background: The human BB1 receptor (or Neuromedin B receptor NMBR) is a receptor for neuromedin-B (NMB), which is a mammalian bombesin-like peptide distributed widely in the central nervous system. The BB1 pathway is involved in the regulation of a wide variety of behaviors, such as spontaneous activity, feeding and anxiety-related behavior. A study using BB1-deficient mice suggested that dysfunction in the BB1 pathway may constitute one of the risk factors of stress vulnerability.

Application: Functional assays

Figure 1





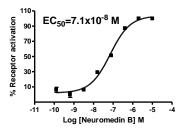


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen[™] Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). Figure 2. Dose-dependent accumulation of intracellular IP1 upon treatment with ligand, measured with IP-one Tb kit. Figure 3. Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

Benya et al. (1995) Expression and characterization of cloned human bombesin receptors. *Mol Pharmacol* 47:10-20.

Moody *et al.* (2000) Nonpeptide neuromedin B receptor antagonists inhibit the proliferation of C6 cells. *Eur J Pharmacol* 409:133-142.

Yamada *et al.* (2002) Restraint stress impaired maternal behavior in female mice lacking the neuromedin B receptor (NMB-R) gene. *Neurosci Lett* 330:163-166.

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Figure 3

