

MULTISCREEN™ DIVISION-ARRESTED CELL LINE HUMAN RECOMBINANT PTH1 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: DC1301-1

Lot Number: DC1301-1-053020

Quantity: 1 vial (4×10^6) frozen cells

Freeze Medium: Cellbanker 2

Host cell: HEK293T

Transfection: Full-length Human PTH1R cDNA (GenBank Accession Number NM_000316.2) with FLAG-tag sequence at the N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS

Background: Parathyroid hormone receptor (PTH1R) functions as a receptor for parathyroid hormone (PTH) and parathyroid hormone-related protein (PTHrP). It is expressed in high levels in bone and kidney and mediates mineral ion homeostasis as well as the paracrine actions of PTHrP, which is important in the process of endochondral bone formation. Defects in PTH1R can cause chondrodysplasia and enchondromatosis. The development of novel PTH receptor ligands could prove to be valuable in the treatment of diseases such as osteoporosis and hypercalcemia.

Application: Functional assays

Figure 1:

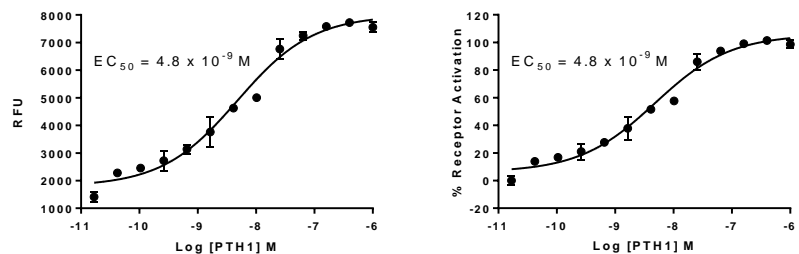


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

Mannstadt *et al.* (1999) Receptors for PTH and PTHrP: their biological importance and functional properties. *Am. J. Physiol.* 277 (5 Pt 2): F665-75.

Langub *et al.* (2001) Parathyroid hormone/parathyroid hormone-related peptide type 1 receptor in human bone. *J. Bone. Miner. Res.* 16: 448-456.

FOR RESEARCH USE ONLY.

All rights reserved. No part of this document may be reproduced in any form without prior permission in writing.