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MULTISCREEN^{TM} STABLE CELL LINE MEMBRANE RECOMBINANT HUMAN GLP-1 RECEPTOR

Data sheet

PRODUCT INFORMATION

Catalog Number: MC1267

Lot Number: MC1267-04122013

Quantity: 1 vial (14.49 mg/mL, 1 mg)

Packaging Buffer: 20 mM Gly-Gly, 1 mM $MgCl_2$, 25 mM Sucrose (pH 7.2)

Host cell: HEK293T

Transfection: Expression vector containing full-length human GLP1R cDNA (GenBank Accession Number NM_002062) with FLAG tag sequence at N-terminus

Recommended Storage: Store at -80°C. Avoid repeated freeze-thaw.

Background: Glucagon-like peptide-1 receptor (GLP1R) is a G protein-coupled receptor for the endogenous insulinotropic peptide glucagon-like peptide-1 (GLP-1). GLP1R is expressed in pancreatic cells and the nervous system, and mediate the effects of GLP-1 in regulating glucose homeostasis through multiple mechanisms including direct actions on the endocrine pancreas and indirect activation of central nervous system controlling gastric emptying, satiety, and body weight. In the brain, receptor activation elicits neurotrophic actions through protection against metabolic and oxidative insults. GLP1R is also implicated in plasticity, memory, and learning. Thus, GLP1R is a potential therapeutic target for both cognitive-enhancing and neuroprotective agents and in the treatment of stroke and Parkinsonism.

Figure 1

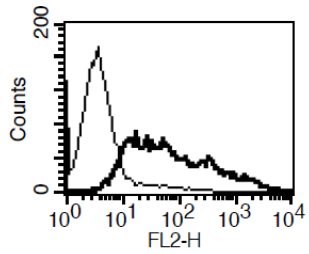

Figure 1. Histogram showing receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick line: receptor-expressing cells.

References:

During *et al*. (2003) Glucagon-like peptide-1 receptor is involved in learning and neuroprotection. *Nature Med* 9:1173-1179.

Dillon *et al*. (1993) Cloning and functional expression of the human glucagon-like peptide-1 (GLP-1) receptor. *Endocrinology* 133:1907-1910.

Stoffel *et al*. (1993) Human glucagon-like peptide-1 receptor gene: localization to chromosome band 6p21 by fluorescence in situ hybridization and linkage of a highly polymorphic simple tandem repeat DNA polymorphism to other markers on chromosome 6. *Diabetes* 42:1215-1218.

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