

MULTISCREEN™ STABLE CELL LINE MOUSE RECOMBINANT H4 RECEPTOR

PRODUCT INFORMATION

Catalog Number: CGm1030

Lot Number: CGm1030-122613

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

Freeze Medium: Sigma Freezing Medium (C-6164)

Host cell: HEK293T Gq*α*5

Transfection: Expression vector containing full-length mouse HRH4 cDNA (GenBank Accession Number NM_153087.1) with FLAG tag sequence at N-terminus

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS, 1 μ g/mL puromycin, 250 μ g/mL hygromycin

Stability: In progress

Data sheet

Background: Histamine is one of the most studied biomolecules in medicine and is most notably known for its effects on smooth muscle contraction, vascular permeability and regulation of stomach acid. The histamine receptor H4 has been shown to have a role in chemotaxis and mediator release in a variety of immune cells, such as mast cells, eosinophils, dendritic cells, and T cells. The development of potent H4 receptor antagonists has great potential to open up the pathway for new therapeutic treatments in chronic inflammatory diseases, such as bronchial asthma, allergic gastrointestinal disease, and atopic dermatitis.

Application: Functional assays

Figure 1

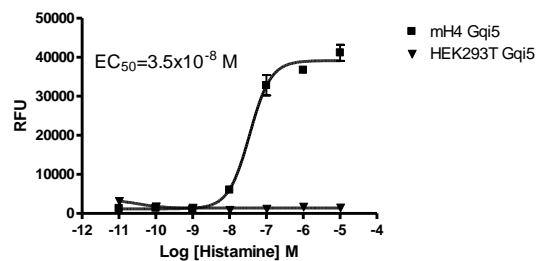


Figure 2

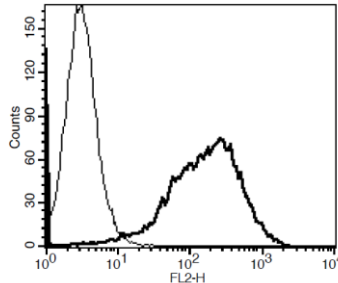


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with Multiscreen™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01). **Figure 2.** Receptor expression on cell surface measured by flow cytometry (FACS) using an anti-FLAG antibody. Thin line: parental cells; thick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

References:

Daugherty (2004) Histamine H₄ antagonism: a therapy for chronic allergy?. *Br J Pharmacol* 142:5-7.

Nguyen *et al.* (2001) Discovery of a novel member of the histamine receptor family. *Mol Pharmacol* 59:427-433.

Liu *et al.* (2001) Comparison of human, mouse, rat, and guinea pig histamine receptors reveals substantial pharmacological species variation. *J Pharmacol Exp Ther* 299:121-130.

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