

**MULTISCREEN™ DIVISION ARRESTED CELL LINE  
HUMAN RECOMBINANT MC4 RECEPTOR**

**PRODUCT INFORMATION**

**Catalog Number:** DH1343

**Lot Number:** DH1343-080911

**Quantity:** 1 vial ( $4 \times 10^6$ ) frozen cells

**Freeze Medium:** Sigma Freezing Medium (C-6164)

**Host cell:** HEK293T

**Transfection:** Expression vector containing full-length human MC4R cDNA (GenBank Accession Number NM\_005912.2) with FLAG tag sequence at N-terminus

**Recommended Storage:** Liquid nitrogen upon receiving

**Propagation Medium:** DMEM, 10% FBS

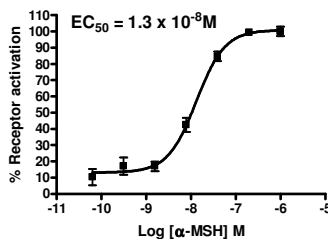
**Stability:** Stable for 1-2 days after thawing

**Data sheet**

**Background:** The melanocortin receptor MC4 is expressed in the central nervous system, gastrointestinal tract and placenta. The melanocortin family is essential in the control of body weight homeostasis, sexual behavior, and autonomic functions; MC4 receptors are primarily involved in the regulation of food uptake. MC4 agonists have great potential in the treatment of weight disorders and sexual dysfunction, whereas MC4 antagonists may be useful in the treatment of anorectic and cachectic conditions.

**Application:** Functional assays

**Figure 1**



**Figure 1.** Dose-dependent stimulation of intracellular cAMP level upon treatment with ligand, measured with cAMP HiRange kit (Cisbio 62AM6PEC).

**References:**

Gantz *et al.* (1993) Molecular cloning of a novel melanocortin receptor. *J Biol Chem* 268:8246-8250.

Voisey *et al.* (2003) Melanocortins and their receptors and antagonists. *Curr Drug Targets* 4:589-597.

Wikberg *et al.* (2008) Targeting melanocortin receptors: an approach to treat weight disorders and sexual disorders. *Nat Rev Drug Discov* 7:307-323.

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