

**MULTISCREEN™ STABLE CELL LINE**  
**RAT RECOMBINANT KiSS1 (GPR54) RECEPTOR**

**PRODUCT INFORMATION**

**Catalog Number:** C1036-1

**Lot Number:** C1036-1-073005

**Quantity:** 1 vial ( $2 \times 10^6$ ) frozen cells

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

**Host cell:** CHO dhfr<sup>-</sup>

**Transfection:** Full-length rat GPR54 cDNA (GenBank Accession Number NM\_023992)

**Recommended Storage:** Liquid nitrogen upon receiving

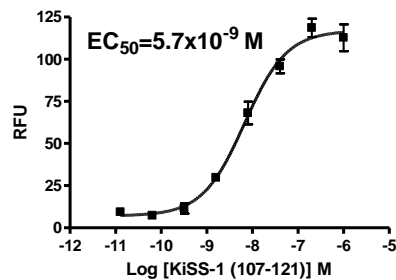
**Propagation Medium:** Alpha-MEM, 10% FBS, 800 µg/mL G418

**Stability:** Stable in culture for minimum of two months

**Data sheet**

**Background:** The Kisspeptin receptor KiSS1 is also known as metastin receptor or GPR54. Kisspeptin is a metastasis suppressor protein that suppresses metastasis in malignant melanomas and in some breast carcinomas without affecting tumorigenicity. The metastasis suppressor properties may be mediated in part by cell cycle arrest and induction of apoptosis in malignant cells. The KiSS1 receptor is involved in thyroid cancer, esophageal squamous cell carcinoma and hepatocellular carcinoma.

**Application:** Functional assays



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

**References:**

Shahab *et al.* (2005) Increased hypothalamic GPR54 signaling: a potential mechanism for initiation of puberty in primates. *Proc Natl Acad Sci USA* 102:2129-2134.

Becker *et al.* (2005) Activation of GPR54 promotes cell cycle arrest and apoptosis of human tumor cells through a specific transcriptional program not shared by other Gq-coupled receptors. *Biochem Biophys Res Commun* 326:677-686.

Ikeguchi *et al.* (2004) Clinical significance of the loss of KiSS-1 and orphan G-protein-coupled receptor (hOT7T175) gene expression in esophageal squamous cell carcinoma. *Clin Cancer Res* 10:1379-1383.

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