

MULTISCREEN™ DIVISION ARRESTED CELL LINE HUMAN RECOMBINANT KiSS1 RECEPTOR (GPR54)

Data sheet

PRODUCT INFORMATION

Catalog Number: DC1036

Lot Number: DC1036-030323

Quantity: 1 vial (4 x 10⁶) frozen cells

Freeze Medium: Cellbanker 2
(Amsbio)

Host cell: CHO dhfr

Transfection: Full-length human
GPR54 cDNA (GenBank Accession
Number NM_032551)

Recommended Storage: Liquid
nitrogen upon receiving

Propagation Medium: Alpha-MEM,
10% FBS

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 1

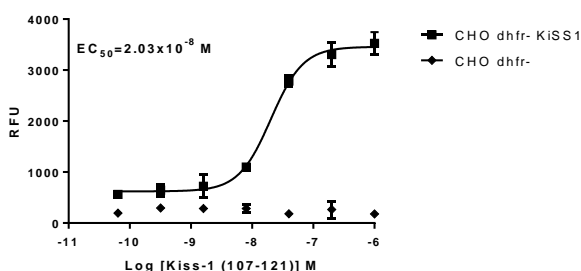


Figure 1: Dose-dependent calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

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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