

HUMAN RECOMBINANT UT RECEPTOR MULTISCREEN™ DIVISION-ARRESTED CELL LINE

Data sheet

PRODUCT INFORMATION

Catalog Number: DC1035-1a

Lot Number: DC1035-1a-110422

Quantity: 1 vial (4×10^6) frozen cells

Freeze Medium: Cell Banker 2

Host cell: CHO-K1

Transfection: Full-length human UTS2R cDNA (GenBank Accession Number NM_018949.1)

Recommended Storage: Liquid nitrogen upon receiving

Propagation Medium: DMEM, 10% FBS

Background: The urotensin 2 receptor (UT or GPR14) is high affinity receptor for urotensin-2 and urotensin-2B. In human, Urotensin II is the most potent vasoconstrictor known, possibly contributing to several human cardiovascular diseases. Both UT receptor and urotensin II are widely expressed in many other tissues, implicating urotensin II in the pathogenesis of a variety of disease processes ranging from hypertension to hepatic cirrhosis and UT antagonists for the possibility of a new range of therapeutic drugs. Recent researches are showing that there are ligands inhibiting the activation of Erk1/2 and JNK by blocking the binding of UII and GPR14, thereby alleviating hepatic steatosis in rats with AS, ultimately restoring lipid metabolism in the liver and alleviating AS lesions.

Application: Functional assays

Figure 1

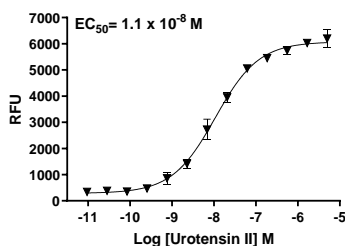


Figure 1. Dose-dependent stimulation of calcium flux upon treatment with ligand, measured with MULTISCREEN™ Calcium 1.0 No Wash Assay Kit (Multispan MSCA01).

References:

- Cui *et al.* (2021). Urotensin II receptor antagonist decreases hepatic steatosis in rats with experimental atherosclerosis via the MAPK/Erk/JNK pathway. *Mol Med Rep.* 2021 Apr;23(4):284.
- Kemp *et al.* (2005) Urotensin II: a vascular mediator in health and disease. *Curr Vasc Pharmacol* 3:159-168.
- Carotenuto *et al.* (2004) Urotensin-II receptor peptide agonists. *Med Res Rev* 24:577-588.

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