

U2OS GRM5 Gq Cell Line

Catalog Number: 95-1020C3 **Lot Number:** See Vial
Contents: 2 vials, 1 x 10⁶ cells per vial in 1 mL

Background

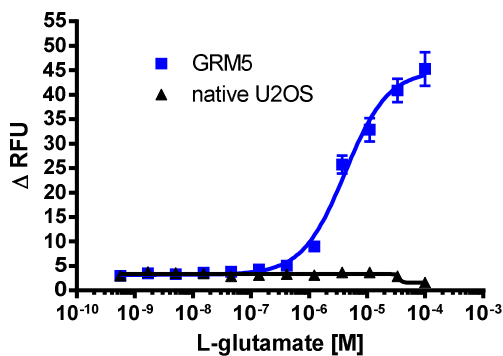
DiscoverX[®] Calcium cell lines overexpress naturally Gq coupled, wildtype GPCRs and are designed to detect calcium mobilization in response to agonist stimulation of the receptor. Signal can be detected using the Calcium No Wash^{PLUS} Detection Kit.

Product Information

Target GPCR: GRM5
Description: Metabotropic glutamate receptor 5
Receptor Family: Metabotropic glutamate
Coupling: Gq
Accession Number: NM_000842.3
GPCR Species: Human
Cell Type: U2OS
Storage: Short term (<24 h): Store at -80°C; Long term (>24 h): Store in vapor phase of liquid nitrogen.

Functional Performance

Cells were plated in a 384-well plate and incubated overnight at 37°C and 5% CO₂ to allow the cells to attach and grow. Culture media was removed and replaced with dye loading buffer from the Calcium No Wash^{PLUS} detection kit according to the recommended protocol. Target cells and native parental cells were stimulated with a control agonist and calcium mobilization was detected using a FLIPR[®] Tetra (Molecular Devices, Inc.). Please refer to page 2 for recommended assay reagents, detection reagents, and control compounds.



Cell Number/Well: 10000
Control Agonist: L-Glutamate
Signal Read Time (@ 2 second intervals): 2 Minutes
EC₅₀ for Agonist Stimulation (nM): 4177
Signal:Background at Agonist E_{max}: 1.4

Passage Stability

This cell line has been confirmed to be stable through 10 passages with no significant drop in assay window or change in EC₅₀.

Mycoplasma Testing

This lot was tested and found to be free of mycoplasma contamination. Data available upon request.

Required Materials

The following additional materials are required but not provided:

Product Use*	Product Description	Catalog Number
Detection Reagent	Calcium No Wash ^{PLUS}	90-0091
Cell Culture	AssayComplete™ Cell Culture Kit-103	92-3103G
Cell Plating	AssayComplete™ Cell Plating 5 Reagent	93-0563R5A
Cell Detachment	AssayComplete™ Cell Detachment Reagent	92-0009
Cell Thawing	AssayComplete™ Thawing Reagent T3	92-4103TR
Cell Freezing	AssayComplete™ Freezing Reagent F3	92-5103FR

*Please inquire about our cell line-specific AssayComplete Starter Packs to get you started with your cell culture needs.

Required Antibiotics

Antibiotic Name	Concentration (µg/mL)	Catalog Number
AssayComplete™ Puromycin	Not Applicable	Not Applicable
AssayComplete™ Hygromycin B	Not Applicable	Not Applicable
AssayComplete™ G418	500	92-0030

Additional Ligand Information

Control Agonist: L-Glutamate

Vendor: DiscoverX® (Catalog No. 92-1197)

For order placement or technical support, please call 1.866.448.4864 (North America) or +44.121.260.6142 (Europe) or e-mail info@discoverx.com. For additional information, please visit discoverx.com.

Limited Use License Agreement

These products may be covered by issued US and/or foreign patents, patent application and subject to Limited Use Label License.

Please visit discoverx.com/license for a list of products that are governed by limited use label license terms and relevant patent and trademark information.