

U2OS GRM1 Gq Cell Line

Catalog Number: 95-1021C3 **Lot Number:** See Vial
Contents: 2 vials, 1 x 10⁶ cells per vial in 1 mL

Background

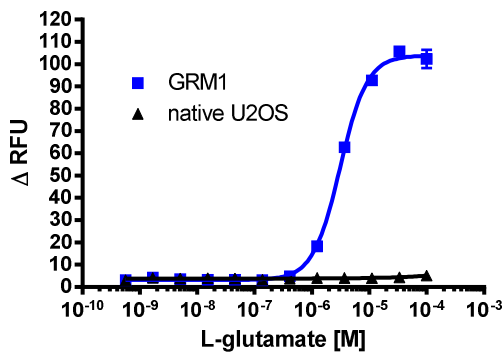
DiscoverX[®] Calcium cell lines overexpress naturally Gq coupled, wildtype GPCRs and are designed to detect calcium mobilization in response to agonist stimulation of the receptor. Signal can be detected using the Calcium No Wash^{PLUS} Detection Kit.

Product Information

Target GPCR: GRM1
Description: Metabotropic glutamate receptor 1
Receptor Family: Metabotropic glutamate
Coupling: Gq
Accession Number: NM_000838.2
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): 3094
Signal:Background at Agonist E_{max}: 1.8

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.

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