

human Opioid delta Receptor Cell Line

Product No.: 6110549-K

Lot No.: 2533369

Material Provided

Cells: 2 x 1 mL frozen aliquot (6110549-WV)

Format: ~5 x 10⁶ cells/mL in freezing medium

Product Information

Cellular Background: HEK293

GenBank Accession Number: NM_000911 (C27F, A370R)

Cell Line Development: Our expression plasmid containing the sequence coding for the human Opioid delta receptor was transfected in HEK293 cells. Clones were obtained by limit dilution and compared for receptor expression levels by radioligand binding assay. The clone with the highest receptor expression level was selected for characterization in binding and functional assays.

Receptor expression level (B_{max}): Estimated to be 11 pmol/mg protein, using [³H]-Naltrindole.

Shipping Conditions: Shipped on dry ice. Please ensure dry ice is still present in the package upon receipt or contact customer support.

Storage Conditions: Store in liquid nitrogen (vapor phase) immediately upon receipt.

Quality Control

Mycoplasma: This cell line tested negative for mycoplasma.

Historical Cell Line Validation using Membrane Preparation*:

Saturation and Competition Binding Assay

| | |
|------------------------|---|
| Assay Buffer: | 50 mM Tris-HCl pH 7.4, 10 mM MgCl ₂ , 1 mM EDTA |
| Wash Buffer: | 50 mM Tris-HCl pH 7.4 |
| Binding Protocol: | Binding assays are performed in 550 μ L total volume according to the following conditions: |
| 1 - Membrane dilution: | 0.05 mL of membranes + 24.95 mL assay buffer (1:500 dilution) |
| 2 - Incubation: | 25 μ L of incubation buffer or Naltrindole (Sigma N115) 1 μ M final for non specific binding (Saturation binding assay) |
| | <i>For competition binding assay: 25 μL of reference compounds at decreasing concentrations (see figure 2)</i> |
| | 25 μ L of radioligand at the appropriate concentration (see graph below) 500 μ L of diluted membranes |
| 3 - Incubation time: | 60 minutes at 27 $^{\circ}$ C |
| 4 - Filtration: | aspirate and wash 9 x 500 μ L with ice cold wash buffer over GF/C filter (presoaked in 0.3% PEI). |

*Membrane preparation available as 6110549400UA

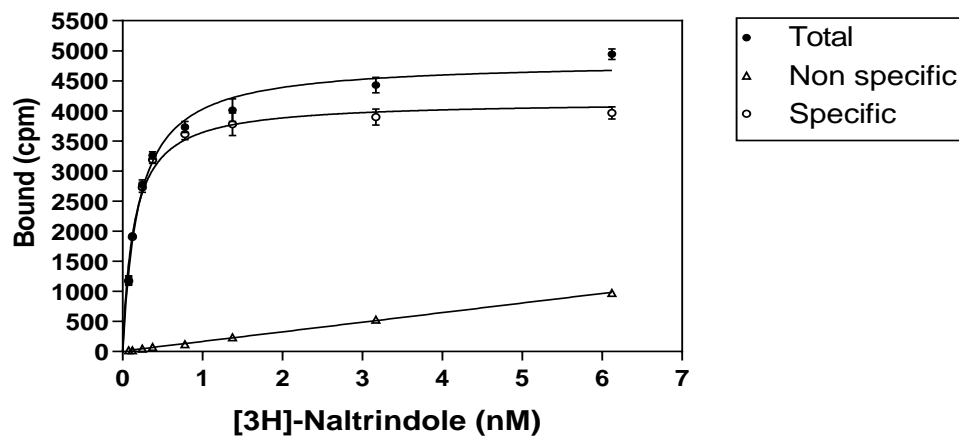


Figure 1: Saturation binding assay curve (filtration)
96-well saturation binding assay curve (9 μ g membranes/well, TopCount[®]) using [³H]-Naltrindole (Revvity NET1065 Lot No.: CUSM03012018JB)

Typical Product Data

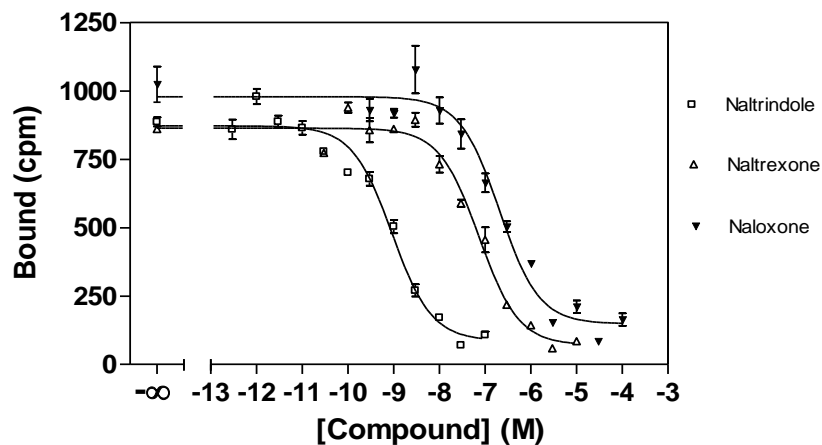


Figure 2: Competition binding assay curve (filtration)
 96-well competition binding assay curve (9 μ g membranes/well,
 TopCount®). Recommended radioligand concentration = 0.15 nM.

*Even though two sites can be observed occasionally with some ligands, the data presented is derived from single site fitting.

| Reference Compounds | Ki (nM) |
|---------------------|---------|
| Naltrindole | 0.37 |
| Naltrexone | 30 |
| Naloxone | 83 |



Reference of Cell Culture Media

| Name | Provider | Cat. Number |
|--|-------------------------|-------------|
| MEM/Earles | Hyclone | SH30024.02 |
| Advanced DMEM/F12 | ThermoFisher (Gibco) | 12634-010 |
| EMEM | Lonza | 06-174G |
| EX-CELL® CHO DHFR- | Sigma | C8862 |
| Fetal Clone II | Fisher Hyclone | SH30066.03 |
| FBS | Wisent | 80150 |
| FBS (Heat inactivated- fully thawed serum heated to 57°C for 30 minutes) | Wisent | 80150 |
| G418 Sulfate | Wisent | 400-130-IG |
| Zeocin™ | ThermoFisher (Gibco) | R25005 |
| Blasticidin | ThermoFisher (Gibco) | R210-01 |
| Puromycin | Wisent | 400-160-EM |
| Hygromycin D | ThermoFisher Scientific | 10687010 |
| Trypsin-EDTA | Fisher Scientific | SH30236.02 |
| Sodium Pyruvate | ThermoFisher (Gibco) | 11360 |
| L-Glutamine | ThermoFisher (Gibco) | 25030 |

The information provided in this document is valid for the specified lot number and date of analysis. This information is for reference purposes only and does not constitute a warranty or guarantee of the product's suitability for any specific use. Revvity, Inc., its subsidiaries, and/or affiliates (collectively, "Revvity") do not assume any liability for any errors or damages arising from the use of this document or the product described herein. REVVITY EXPRESSLY DISCLAIMS ALL WARRANTIES, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, REGARDLESS OF WHETHER ORAL OR WRITTEN, EXPRESS OR IMPLIED, ALLEGEDLY ARISING FROM ANY USAGE OF ANY TRADE OR ANY COURSE OF DEALING, IN CONNECTION WITH THE USE OF INFORMATION CONTAINED HEREIN OR THE PRODUCT ITSELF.



Revvity
940 Winter Street
Waltham, MA 02451 USA

(800) 762-4000
www.revvity.com

For a complete listing of our global offices, visit www.revvity.com
Copyright ©2023, Revvity, Inc. All rights reserved.