

## CERTIFICATE OF ANALYSIS

### Product Information

Product Name	CHO-K1/Gα15/OPRM1
Cat. No.	M00304
Lot No.	B80121710
Host Cell:	CHO-K1
Target Gene:	OPRM1
Quantity:	2 vials of frozen cells, > 1x10 <sup>6</sup> cells/vial
Shipping Condition:	Dry Ice
Recommended Storage Condition:	Liquid Nitrogen

### Stable Cell Line Information

**Recommended Cell Culture Medium:** F12 + 10% FBS + 100 µg/ml Hygromycin B + 200 µg/ml Zeocin

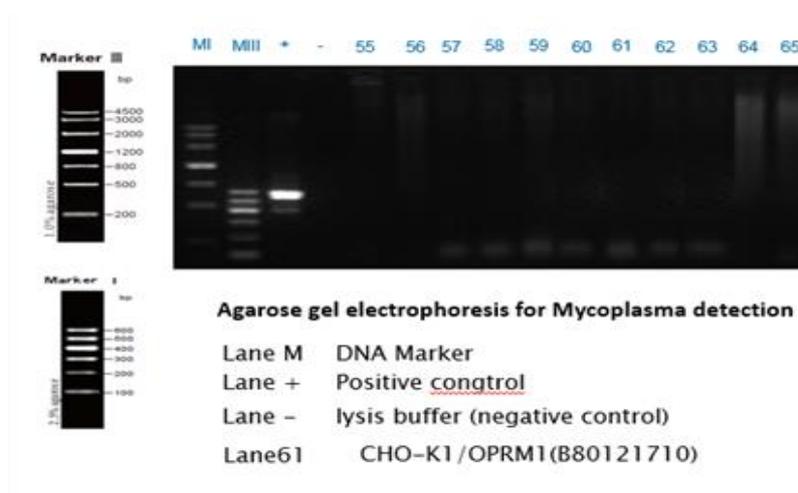
**Freeze Medium:** 45%FBS, 45%F12, 10% (V/V) DMSO

**Application:** Functional assay for CHO-K1/Gα15/OPRM1

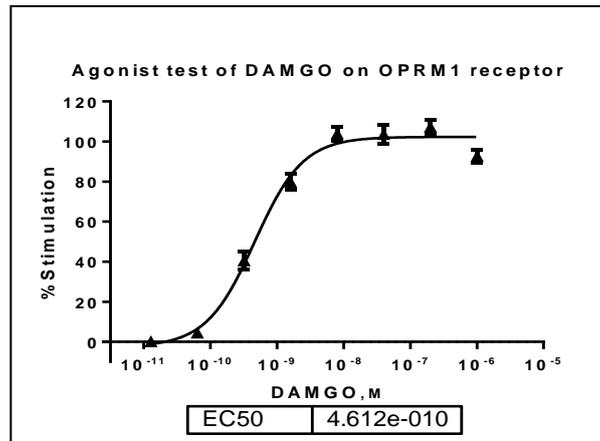
Test Item	Specification	Result
Mycoplasma 160	Negative.	Negative, Appendix 1
Functional assay	Calcium assay	EC <sub>50</sub> = 0.46 nM
Functional assay	cAMP assay	EC <sub>50</sub> = 0.28 nM

### Appendix

#### Appendix 1: Mycoplasma 160

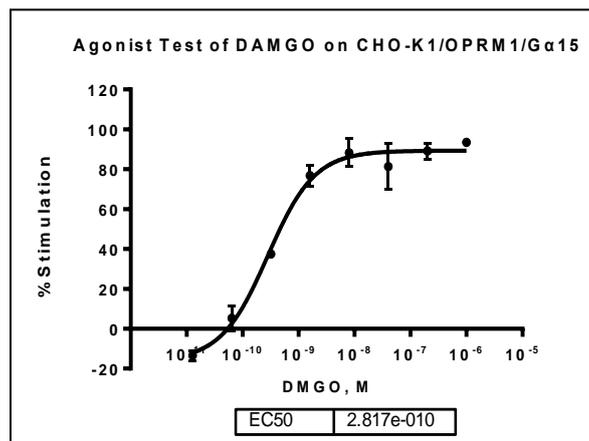


**Appendix 2 : Calcium assay**



**Figure 2.** DAMGO-induced concentration-dependent stimulation of intracellular calcium mobilization in CHO-K1/OPRM1/Gα15 and CHO-K1/Gα15 cells. The cells were loaded with Calcium-4 prior to stimulation with OPRM1 receptor agonist, DAMGO. The intracellular calcium change was measured by FLIPR. The %Stimulation were plotted against the log of the cumulative doses (5-fold dilution) of DAMGO (Mean ± SD, n= 3). The EC50 of DAMGO on OPRM1 co-expressing with Gα15 in CHO-K1 cells was 0.46 nM. The S/B of DAMGO on OPRM1 co-expressing with Gα15 in CHO-K1 cells was 12

**Appendix 3: cAMP assay**



**Figure 3.** DMGO-induced concentration-dependent stimulation of intracellular cAMP release in CHO-K1/OPRM1/Gα15. The cells were stimulated by DAMGO with OPRM1 receptor. The intracellular cAMP change was measured by PHERAStar. The effects of agonist (%stimulation) were plotted against the log of the cumulative doses (5-fold dilution) of DMGO (Mean ± SD, n =2). The EC50 of DMGO on OPRM1 co-expressing with Gα15 in CHO-K1 cells was 0.28 nM. The S/B of DMGO on OPRM1 co-expressing with Gα15 in CHO-K1 cells was 1.4.

**Caution**

For research use only. Not intended for household use. If you have any questions about the Certificate of Analysis, please contact our customer service representative at 1-877-436-7274 (Toll-Free), or 1-732-885-9188.

Certified by: *Leon Soy* Date: 03/19/2018  
 Department of Biologics Development Director

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