

# Technical Data Certificate of Analysis

Caution: For Laboratory Use. A research chemical for research purposes only.

## Membrane Target Systems™ human Opioid delta Receptor

PRODUCT No.: RBHODM400UA

LOT No.: 492-912-A

### MATERIAL PROVIDED

**MEMBRANES:** 1 x 400 units / 1000 µl frozen aliquot.  
**PACKAGING BUFFER:** 50 mM Tris-HCl (pH 7.4), 0.5 mM EDTA, 10 mM MgCl<sub>2</sub>, 10% sucrose.

### PRODUCT INFORMATION

**CELLULAR BACKGROUND:** CHO-K1  
**PROTEIN ACCESSION NUMBER:** not available  
**UNIT SIZE:** 15 µg protein / unit  
**STORAGE CONDITIONS:** Store at -80°C. **Freeze-thaw is not recommended** as it can affect product performance and homogeneity. In order to minimize negative impact of freeze-thawing, flash freeze in liquid nitrogen for 30 seconds prior to transferring to -80°C.  
**STABILITY:** This product is stable for at least 3 years from reception if used and stored under recommended conditions.

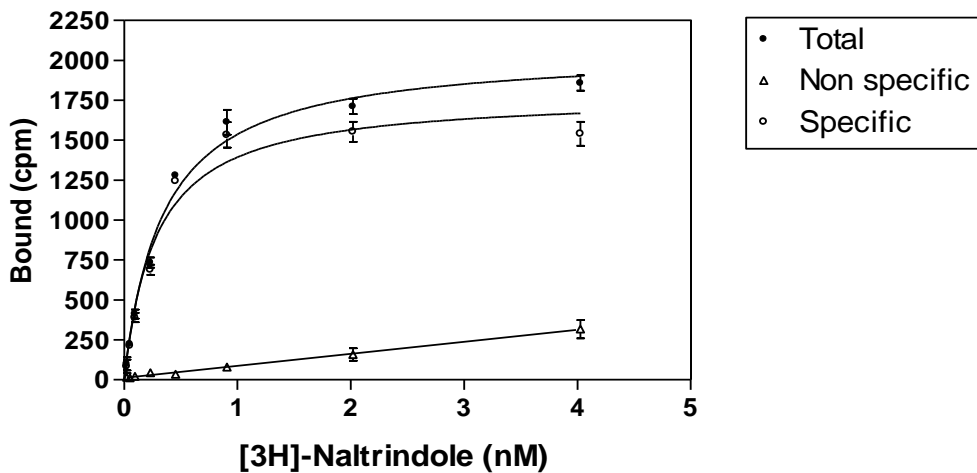
### QUALITY CONTROL

**EXPRESSION LEVEL (B<sub>Max</sub>):** 3.8 pmol/mg membrane protein.  
**K<sub>D</sub> FOR [<sup>3</sup>H]-NALTRINDOLE :** 0.28 nM  
**PROTEIN CONCENTRATION:** 6 mg/ml

### RECOMMENDED ASSAY CONDITIONS

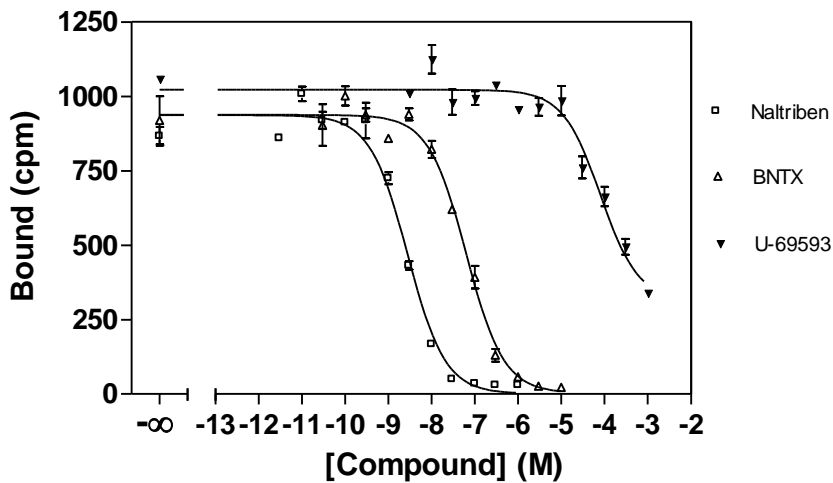
**ASSAY BUFFER:** 50 mM Tris-HCl pH 7.4, 5 mM MgCl<sub>2</sub>  
**WASH BUFFER:** 50 mM Tris-HCl pH 7.4, 5 mM MgCl<sub>2</sub>  
**BINDING PROTOCOL:** Binding assays are performed in 550 µl total volume according to the following conditions:  
1 - Membrane dilution: 0.125 ml of membranes + 24.875 ml assay buffer (1:200 dilution)  
2 - Incubation: 25 µl of incubation buffer or unlabeled ligand  
(Naltrexone, 100 µM final for non specific binding)  
25 µl of radioligand at the appropriate concentration (see graph on page 2)  
500 µl of diluted membranes  
3 - Incubation time: 60 minutes at RT °C  
4 - Filtration: Over GF/C filter presoaked in 0.5 % PEI then washed 9x with 500 µl of ice cold wash buffer.

## LOT SPECIFIC DATA



**Figure 1: SATURATION BINDING ASSAY CURVE (FILTRATION)**  
96-well saturation binding assay curve (15  $\mu$ g membranes/well, TopCount™).

## TYPICAL PRODUCT DATA



**Figure 2: COMPETITION BINDING ASSAY CURVE (FILTRATION)**  
96-well competition binding assay curve (15  $\mu$ g membranes/well, TopCount™). Recommended radioligand concentration = 0.4 nM.

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

Reference Compounds	K <sub>i</sub> (nM)
Naltriben	1.6
BNTX	37
U-69593	47145

## SUGGESTED MATERIALS AND INSTRUMENTATION

	SUPPLIER	CATALOG #
<b>PHARMACOLOGY ASSAYS</b>		
• [ <sup>3</sup> H]-Naltrindole	PerkinElmer	NET1065
• Naltrexone	Sigma	N3136
• Unifilter-96 GF/C	PerkinElmer	6005174
• Unifilter-96 GF/B	PerkinElmer	6005177
• Filtermat A GF/C	PerkinElmer	1450-421
<b>INSTRUMENTS</b>		
• TopCount™	PerkinElmer	visit the web site or contact your local sales office
• Microbeta®	PerkinElmer	visit the web site or contact your local sales office
• FilterMate Unifiter 96-Harvester	PerkinElmer	C961962

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