

## Human $\mu$ -Opiate receptor (OPRM1) in MSP1E3D1-His\_POPC nanodiscs

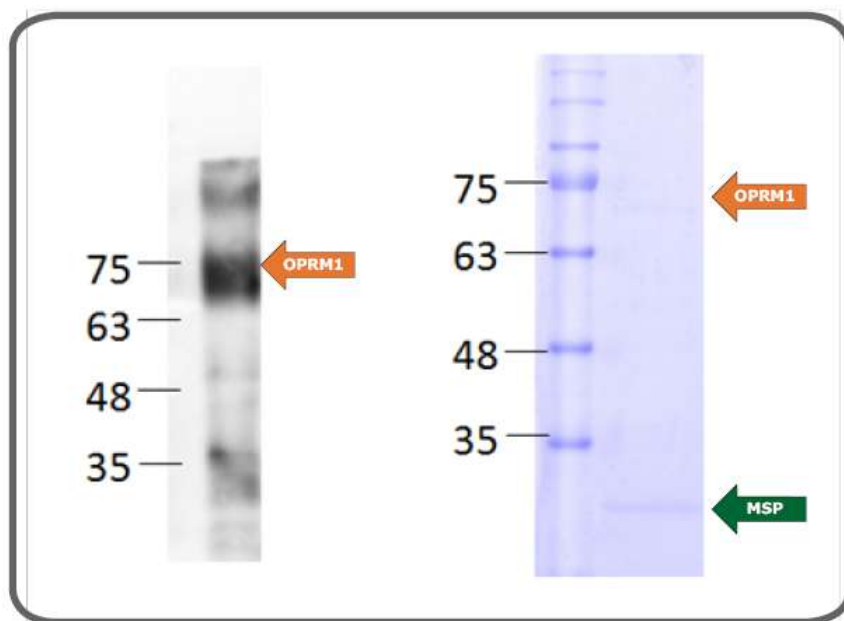
Product	Catalog No.	Package size
OPRM1 protein nanodisc complex (20 $\mu$ g)	29001	1 x 20 $\mu$ g
OPRM1 protein nanodisc complex (100 $\mu$ g)	29003	5 x 20 $\mu$ g

Please contact us for bulk quantities and for OPRM1 in detergent.

### Product Description

Alternative names	MOR1, MOP, Mu opiate receptor
UniProt	<a href="#">P35372</a>
Protein class	GPCR, class A (Rhodopsin-like receptors)
Organism	Human (Homo sapiens)
Sequence	Full-length, wildtype sequence. <b>Initial methionine in bold, spacer in bold grey, Rho1D4 tag in bold green</b>
	<b>M</b> D S S A A P T N A S N C T D A L A Y S S C S P A P S P G S W V N L S H L D G N L S D P C G P N R T D L G G R D S L C P P T G S P S M I T A I T I M A L Y S I V C V V G L F G N F L V M Y V I V R Y T K M K T A T N I Y I F N L A L A D A L A T S T L P F Q S V N Y L M G T W P F G T I L C K I V I S I D Y Y N M F T S I F T L C T M S V D R Y I A V C H P V K A L D F R T P R N A K I I N V C N W I L S S A I G L P V M F M A T T K Y R Q G S I D C T L T F S H P T W Y W E N L L K I C V F I F A F I M P V L I I T V C Y G L M I L R L K S V R M L S G S K E K D R N L R R I T R M V L V V V A V F I V C W T P I H I Y V I I K A L V T I P E T T F Q T V S W H F C I A L G Y T N S C L N P V L Y A F L D E N F K R C F R E F C I P T S S N I E Q Q N S T R I R Q N T R D H P S T A N T V D R T N H Q L E N L E A E T A P L P <b>G S S</b> <b>G T E T S Q V A P A</b>
Affinity tags	Rho1D4 (C-terminal)
Size (excl. additional elements)	413 (400) amino acids 45,953 (44,779) Da
Expression system	Sf9 (baculovirus)
Purified via	PureCube Rho1D4 Agarose
Buffer	100 mM NaCl, 20 mM HEPES, pH 7.4
Nanodisc	MSP1E3D1 protein, His-tagged, with POPC lipids
Purity (SDS-PAGE)	>98% (see Fig. 1)
Homogeneity	Size exclusion chromatography
Function	OPRM1 is the most relevant physiological target for most clinically relevant analgesics. Receptor for endogenous opioids such as beta-endorphin and endomorphin, and for natural and synthetic opioids including morphine, heroin, DAMGO, fentanyl, etorphine, buprenorphin and methadone.

## Quality Control



**Fig. 1: SDS-PAGE of OPRM1 in nanodisc, purified via Rho1D4 affinity chromatography.**

Orange arrow: GPCR; Green arrow: membrane scaffold protein; Rho1D4 westernblot and coomassie gel

## Applications

- SDS-PAGE
- Western Blot
- Ligand binding assays (e.g., SPR)
- Biochemical and biophysical analyses

## Shipping & Storage

Shipment Temperature	Dry ice
Storage	-80°C
	Avoid freeze-thaw cycles

Disclaimer: Our products are intended for molecular biology applications. These products are not intended for the diagnosis, prevention, or treatment of a disease.

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**Proteins are our passion.**