

Product datasheet for PH310383

OriGene Technologies, Inc.

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Mu Opioid Receptor (OPRM1) (NM_000914) Human Mass Spec Standard

Product data:

Product Type: Mass Spec Standards

Description: OPRM1 MS Standard C13 and N15-labeled recombinant protein (NP_000905)

Species:HumanExpression Host:HEK293

Expression cDNA Clone

or AA Sequence:

RC210383

Predicted MW: 44.8 kDa

Protein Sequence: >RC210383 protein sequence

Red=Cloning site Green=Tags(s)

MDSSAAPTNASNCTDALAYSSCSPAPSPGSWVNLSHLDGNLSDPCGPNRTDLGGRDSLCPPTGSPSMITA ITIMALYSIVCVVGLFGNFLVMYVIVRYTKMKTATNIYIFNLALADALATSTLPFQSVNYLMGTWPFGTI LCKIVISIDYYNMFTSIFTLCTMSVDRYIAVCHPVKALDFRTPRNAKIINVCNWILSSAIGLPVMFMATT KYRQGSIDCTLTFSHPTWYWENLLKICVFIFAFIMPVLIITVCYGLMILRLKSVRMLSGSKEKDRNLRRI TRMVLVVVAVFIVCWTPIHIYVIIKALVTIPETTFQTVSWHFCIALGYTNSCLNPVLYAFLDENFKRCFR

EFCIPTSSNIEQQNSTRIRQNTRDHPSTANTVDRTNHQLENLEAETAPLP

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-Myc/DDK

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Concentration: >0.05 μg/μL as determined by microplate BCA method

Labeling Method: Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3

Storage: Store at -80°C. Avoid repeated freeze-thaw cycles.

Stability: Stable for 3 months from receipt of products under proper storage and handling conditions.

RefSeq: NP 000905

RefSeq Size: 15279 RefSeq ORF: 1200

Synonyms: LMOR; M-OR-1; MOP; MOR; MOR1; OPRM

Locus ID: 4988





UniProt ID: P35372, G8XRH5

Cytogenetics: 6q25.2

Summary: This gene encodes one of at least three opioid receptors in humans; the mu opioid receptor

(MOR). The MOR is the principal target of endogenous opioid peptides and opioid analgesic agents such as beta-endorphin and enkephalins. The MOR also has an important role in dependence to other drugs of abuse, such as nicotine, cocaine, and alcohol via its modulation of the dopamine system. The NM_001008503.2:c.118A>G allele has been associated with opioid and alcohol addiction and variations in pain sensitivity but evidence for it having a causal role is conflicting. Multiple transcript variants encoding different isoforms have been

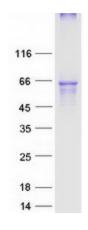
found for this gene. Though the canonical MOR belongs to the superfamily of 7-

transmembrane-spanning G-protein-coupled receptors some isoforms of this gene have only

6 transmembrane domains. [provided by RefSeq, Oct 2013]

Protein Families: Druggable Genome, GPCR, Transmembrane
Protein Pathways: Neuroactive ligand-receptor interaction

Product images:



Coomassie blue staining of purified OPRM1 protein (Cat# [TP310383]). The protein was produced from HEK293T cells transfected with OPRM1 cDNA clone (Cat# [RC210383]) using MegaTran 2.0 (Cat# [TT210002]).