

RECOMBINANT HUMAN MELATONIN RECEPTOR TYPE 1A
2021
Protein information

Target Name	Melatonin receptor type 1A (MTNR1A)
Catalogue Number	PP2
Class	GPCR Class A
Sequence	Full-length, wildtype sequence, with a N-terminus twin Strep tag II , 10xHis-tag , and TEV protease cleavage site : MASAW SH P Q FEKGGGSGGGSGGSAW SH P Q FEKGA HHHHHHHHHH ENLY F Q Q GN G S ALPNASQPVL R GDGARPSWLASALACVL I FT I V D ILGNLLVILSVYRNK K L R NAGN I F V S LAVADLVVA I YP P LV L MS I F N NGWNLG Y L H C Q V S G F L M G L S V I G S I F N I T G I A I N R Y C I C HSLKYDKLYSSK N SLCY V LL I W L L T LA A V L PN L R A G T L Q Y D P R I Y S C T F A Q S V S S A Y T I A V V VFH F L V P M I I V I F C Y L R I W I L V L Q V R Q R V K P D R K P K L K P Q D F R N F V T M F V V F V L F A I C W A P L N F I G L A V A S D P A S M V P R I P E W L F V A S Y M A F N S C L N A I I Y G L L N Q N F R K E Y R R I V S L C T A R V F F V D S S N D V A D R V K W K P S P L M T N N N V V K V D S V
Affinity Tag	StrepX2/His (both N-terminal)
Origin	Human (Homo sapiens)
Theor. MW	44,8 kDa
Uniprot Accession	P48039 (UniProt)

Protein production

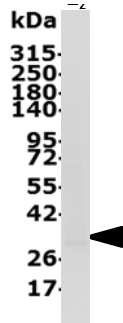
Expression system	Sf9 insect cells (baculovirus)
Purification	Solubilized using CALIXAR patented technology and purified using Metal Affinity Chromatography in presence of Sarkosyl/CHS
Purity	>90%
Activity	Confirmed by radiobinding assay and activation of Gi
Concentration	Up to 5mg/ml
Sample Buffer	25mM Na ₂ HPO ₄ pH 8.0, 150mM NaCl, 0.86%/0.18% Sarkosyl/CHS
Available quantity	From 10µg up to mg scale
References	<ol style="list-style-type: none"> 1- Daulat AM. Et al. Purification and identification of G protein-coupled receptor protein complexes under native conditions. <i>Mol Cell Proteomics</i>. 2007 May;6(5):835-44. Epub 2007 Jan 9. 2- Igonet et al. <i>In preparation</i>.

Miscellaneous

Shipment Temperature	Dry ice
Storage conditions	Store at -80°C

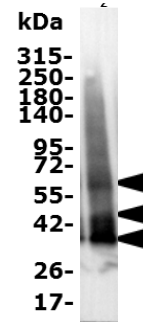


Quality Controls (Purity and Activity):



SDS-PAGE.

IMAC elution fraction of MTNR1A was migrated on a 4-15% Tris-glycine SDS-PAGE and the total proteins were Stain-Free detected. The black arrow indicates full-length MTNR1A.



Western blotting

IMAC elution fraction of MTNR1A was migrated on a 4-15% Tris-glycine SDS-PAGE, transferred to pvdf membrane and immunodetected with a rabbit polyclonal anti-MTNR1A (Fox 25.7, from Ralf Jockers laboratory). Black arrows indicate the target.

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