

MT1A- Melatonin receptor type 1A

Product specification

Acronym: MT1A

Class: GPCR

Origin: Human

Molecular weight: 40 kDa

Application: Screening & display technologies

Purity: >50%

Activity: To be tested

Length: Full Length

TMD: 7

Biological function: Regulation of circadian rhythm

Product description

High affinity receptor for melatonin. Likely to mediate the reproductive and circadian actions of melatonin. The activity of this receptor is mediated by pertussis toxin sensitive G proteins that inhibit adenylate cyclase activity.

Protein Source: MT1 wild type protein.

Fig.1: AA sequence of MT1 protein

10	20	30	40	50
MQGNGSALPN	ASQPVLRGDG	ARPSWLASAL	ACVLIFTIVV	DILGNLLVIL
60	70	80	90	100
SVYRNKKLRN	AGNIFVVSIA	VADLVVAIYP	YPLVLSIFN	NGWNLGYLHC
110	120	130	140	150
QVSGFLMGLS	VIGSIFNITG	IAINRYCYIC	HSLKYDKLYS	SKNSLCYVLL
160	170	180	190	200
IWLLTAAVL	PNLRAGTLQY	DPRIYSCTFA	QSVSSAYTIA	VVVFHFLVPM
210	220	230	240	250
IIVIFCYLRI	WILVLQVRQR	VKPDRKPKLK	PQDFRNFVTM	FVVFVLFVLAIC
260	270	280	290	300
WAPLNFIGLA	VASDPASMVP	RIPEWLFVAS	YYMAYFNSCL	NAIIYGLLNQ
310	320	330	340	350
NFRKEYRRII	VSLCTARVFF	VDSSNDVADR	VKWKPSPLMT	NNNVVKVDSV

Affinity Tag: Histidine tag fused to the N-terminal end of the protein.

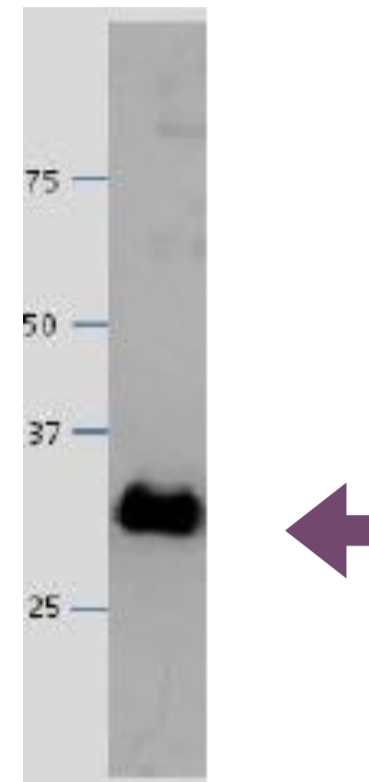
Production conditions: MT1 is expressed in a cell-free expression system in the presence of lipid vesicles. 100 µg can be produced and qualified in about 1 week.

Quality analysis

Purity: Typically > 50% as determined by SDS-Page and Coomassie Blue staining.

Purification procedure: As standard, MT1 proteoliposomes are purified on a sucrose gradient. Further purification steps can be added if required.

Fig.2: Proteoliposome MT1 after purification (Western blot identification)



Formulation

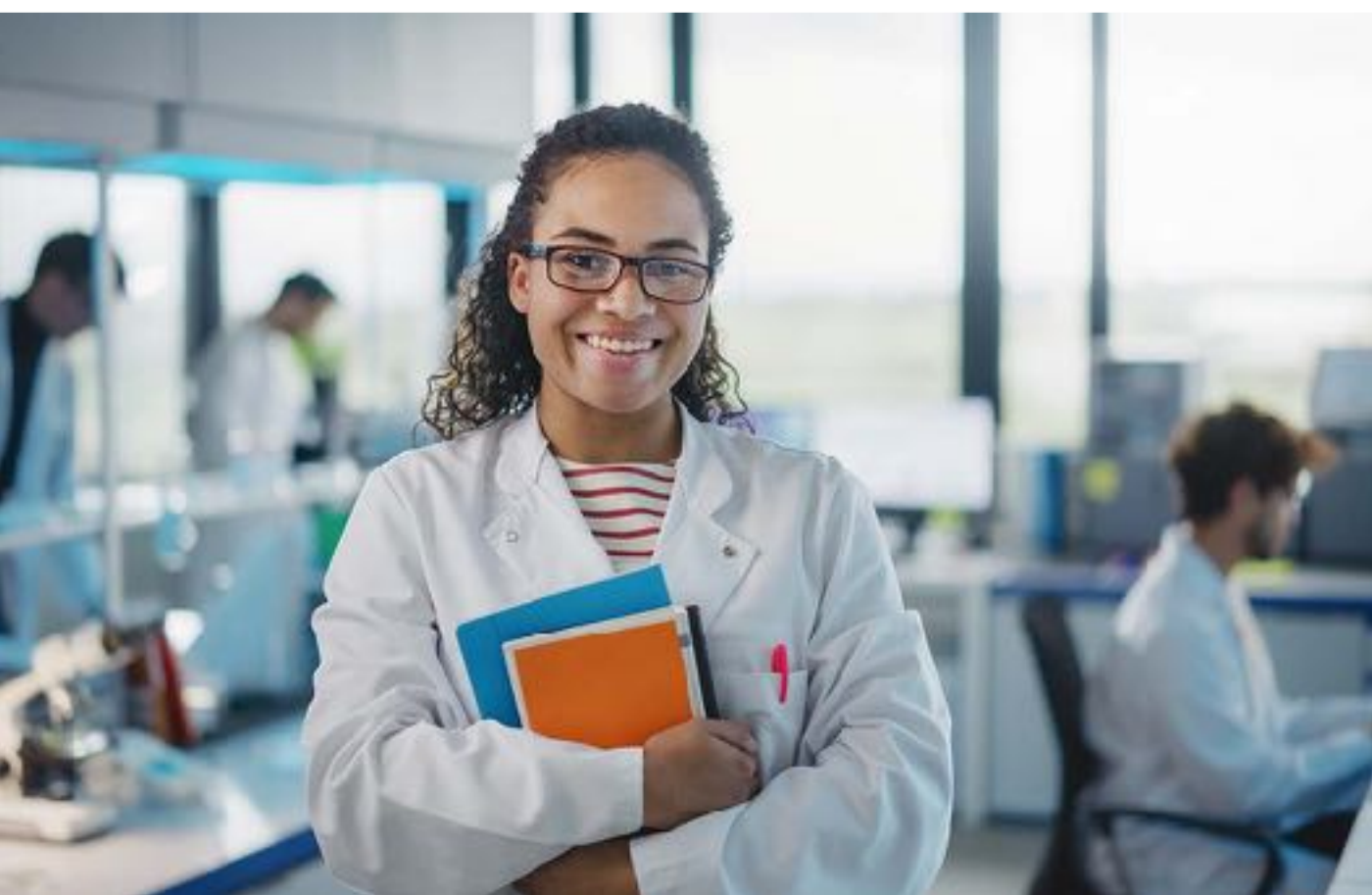
Buffer: Available in Tris 50mM, pH 7.5. Others buffers or customized formulation can be provided upon request.

Customized Hydrophobic matrix: Customized formulation with specific lipids like PEGylated or biotinylated lipids can be used upon request, as well as targeting molecules.

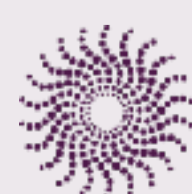
Storage/Stability: Store at +4°C for up to one week or several months at -80°C. Aliquot for storage. Do not freeze-thaw after aliquoting.

Use restrictions: For life science research use only.

Available sizes: 10µg, 20µg, 100 µg, 200 µg, 500 µg, bulk



Need a specific amount, a quote or any additional information?
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