

Datasheet for ABIN3112241

Serotonin Receptor 1A Protein (HTR1A) (AA 1-422) (Strep Tag)



[Go to Product page](#)

Overview

Quantity:	250 µg
Target:	Serotonin Receptor 1A (HTR1A)
Protein Characteristics:	AA 1-422
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Serotonin Receptor 1A protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	<p>MDVLSPGQGN NTTSPAPFE TGGNTTGISD VTVSYQVITS LLLGTLIFCA VLGNA CVVAA IALERSLQNV ANYLIGSLAV TDLMVSVLVL PMAALYQVLN KWT LGQVTCD LFIALDVLCC TSSILHLCAI ALDRYWAITD PIDYVNKRTP RRAAALISLT WLIGFLISIP PMLGWRTPED RSDPDACTIS KDHGYTIYST FGAFYIPLLL MLVLYGRIFR AARFRIRKTV KKVEKTGADT RHGASPAPQP KKS VNGESGS RNWRLGVESK AGGALCANGA VRQGDDGAAL EVIEVHRVGN SKEHLPLPSE AGPTPCAPAS FERKNERNAE AKRKMALARE RKT VKTLGII MGT FILCWLP FFIVALVLPF CESSCHMPTL LGAIINWLGYSNSLLNPVIY AYFNKDFQNA FKKIICKKFC RQ</p> <p>Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</p>
Characteristics:	Key Benefits:

Product Details

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.

Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	Serotonin Receptor 1A (HTR1A)
---------	-------------------------------

Target Details

Alternative Name:	HTR1A (HTR1A Products)
Background:	<p>5-hydroxytryptamine receptor 1A (5-HT-1A) (5-HT1A) (G-21) (Serotonin receptor 1A),FUNCTION: G-protein coupled receptor for 5-hydroxytryptamine (serotonin). Also functions as a receptor for various drugs and psychoactive substances. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase. Beta-arrestin family members inhibit signaling via G proteins and mediate activation of alternative signaling pathways. Signaling inhibits adenylate cyclase activity and activates a phosphatidylinositol-calcium second messenger system that regulates the release of Ca(2+) ions from intracellular stores. Plays a role in the regulation of 5-hydroxytryptamine release and in the regulation of dopamine and 5-hydroxytryptamine metabolism. Plays a role in the regulation of dopamine and 5-hydroxytryptamine levels in the brain, and thereby affects neural activity, mood and behavior. Plays a role in the response to anxiogenic stimuli.</p> <p>{ECO:0000269 PubMed:22957663, ECO:0000269 PubMed:3138543, ECO:0000269 PubMed:8138923, ECO:0000269 PubMed:8393041}.</p>
Molecular Weight:	46.1 kDa
UniProt:	P08908
Pathways:	JAK-STAT Signaling , Synaptic Membrane , Feeding Behaviour

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>

Application Details

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months