

Datasheet for ABIN3096190

TYW1 Protein (AA 1-732) (Strep Tag)



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Overview

| | |
|-------------------------------|---|
| Quantity: | 250 µg |
| Target: | TYW1 |
| Protein Characteristics: | AA 1-732 |
| Origin: | Human |
| Source: | Cell-free protein synthesis (CFPS) |
| Protein Type: | Recombinant |
| Purification tag / Conjugate: | This TYW1 protein is labelled with Strep Tag. |
| Application: | ELISA, Western Blotting (WB), SDS-PAGE (SDS) |

Product Details

| | |
|-----------|---|
| Brand: | AlIcE® |
| Sequence: | <p>MDPSADTWDL FSPLISLWIN RFYIYLGFAV SISLWICVQI VIKTQGKNLQ EKSVPKAAQD</p> <p>LMTNGYVSLQ EKDIFVSGVK IFYGSQTGTA KGFATVLAEA VTSLDLPVAI INLKEYDPDD</p> <p>HLIEEVTSKN VCVFLVATYT DGLPTESAEW FCKWLEEASI DFRFGKTYLK GMRYAVFGLG</p> <p>NSAYASHFNK VGKNVDKWLW MLGAHRVMSR GEGDCDVVKS KHGSIEADFR AWKTKFISQL</p> <p>QALQKGERKK SCGGHCKKGK CESHQHGSEE REEGSHEQDE LHHRDTEEEE PFESSSEEEF</p> <p>GGEDHQLSNS IVDVEDLGKI MDHVKKEKRE KEQQUEEKSL FRNMGRNEDG ERRAMITPAL</p> <p>REALTKQGYQ LIGSHSGVKL CRWTKSMLRG RGGCYKHTFY GIESHRCMET TPSLACANKC</p> <p>VFCWRHHTNP VGTEWRWKMD QPEMILKEAI ENHQNMIIQF KGVPGVKAER FEEGMTVKHC</p> <p>ALSLVGEPIM YPEINRFLKL LHQCKISSFL VTNAQFPAEI RNLEPVTQLY VSVDASTKDS</p> <p>LKKIDRPLFK DFWQRFLDSL KALAVKQQRV VYRLTLVKAW NVDELQAYAQ LVSLGNPDFI</p> <p>EVKGVITYCGE SSASSLTMAH VPWHEEVVQF VHELVDLIPE YEIACEHEHS NCLLIAHRKF</p> |

KIGGEWWTWI DYNRFQELIQ EYEDSGGSKT FSAKDYMART PHWALFGASE RGFDPKDTRH
QRKNKSKAIS GC

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.

Characteristics:

Key Benefits:

- 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®).

Product Details

Purity: > 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

Grade: custom-made

Target Details

Target: TYW1

Alternative Name: TYW1 ([TYW1 Products](#))

Background: S-adenosyl-L-methionine-dependent tRNA 4-demethylwyosine synthase TYW1 (EC 4.1.3.44) (Radical S-adenosyl methionine and flavodoxin domain-containing protein 1) (tRNA wybutosine-synthesizing protein 1 homolog) (tRNA-yW-synthesizing protein),FUNCTION: Probable component of the wybutosine biosynthesis pathway. Wybutosine is a hyper modified guanosine with a tricyclic base found at the 3'-position adjacent to the anticodon of eukaryotic phenylalanine tRNA. Catalyzes the condensation of N-methylguanine with 2 carbon atoms from pyruvate to form the tricyclic 4-demethylwyosine, an intermediate in wybutosine biosynthesis (By similarity). {ECO:0000250}.

Molecular Weight: 83.7 kDa

UniProt: [Q9NV66](#)

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: 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.

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Restrictions: For Research Use only

Handling

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|------------------|--|
| 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 |