

Datasheet for ABIN3074461

## TRMT112 Protein (AA 1-125) (Strep Tag)



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### Overview

Quantity:	1 mg
Target:	TRMT112
Protein Characteristics:	AA 1-125
Origin:	Human
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TRMT112 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

### Product Details

Sequence:	<p>MKLLTHNLLS SHVRGVGSRG FPLRLQATEV RICPVEFNPN FVARMIPKVE WSAFLEAADN LRLIQVPKGP VEGYEENEFF LRTMHLLLE VEVIEGTLQC PESGRMFPIS RGIPNMLLSE EETES</p> <p><b>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.</b></p>
Characteristics:	<p>Key Benefits:</p> <ul style="list-style-type: none"><li>• Made in Germany - from design to production - by highly experienced protein experts.</li><li>• Protein expressed with ALiCE® and purified in one-step affinity chromatography</li><li>• These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).</li><li>• State-of-the-art algorithm used for plasmid design (Gene synthesis).</li></ul>

## Product Details

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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.

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

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Target:	TRMT112
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Alternative Name:	TRMT112 ( <a href="#">TRMT112 Products</a> )
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Background:	Multifunctional methyltransferase subunit TRM112-like protein (tRNA methyltransferase 112 homolog),FUNCTION: Acts as an activator of both rRNA/tRNA and protein methyltransferases (PubMed:25851604, PubMed:18539146, PubMed:20308323, PubMed:25851604, PubMed:31328227, PubMed:31636962, PubMed:31061526). Together with methyltransferase BUD23, methylates the N(7) position of a guanine in 18S rRNA (PubMed:25851604). The
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## Target Details

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heterodimer with N6AMT1/HEMK2 catalyzes N5-methylation of ETF1 on 'Gln-185', using S-adenosyl L-methionine as methyl donor (PubMed:18539146, PubMed:31636962, PubMed:31061526). The heterodimer with N6AMT1/HEMK2 also monomethylates 'Lys-12' of histone H4 (H4K12me1) (PubMed:31061526). The heterodimer with ALKBH8 catalyzes the methylation of 5-carboxymethyl uridine to 5-methylcarboxymethyl uridine at the wobble position of the anticodon loop in target tRNA species (PubMed:20308323). Together with methyltransferase THUMP3, catalyzes the formation of N(2)-methylguanosine at position 6 in a broad range of tRNA substrates and at position 7 of tRNA(Trp) (PubMed:34669960). Involved in the pre-rRNA processing steps leading to small-subunit rRNA production (PubMed:25851604). Together with methyltransferase METTL5, specifically methylates the 6th position of adenine in position 1832 of 18S rRNA (PubMed:33428944, PubMed:35033535, PubMed:31328227). {ECO:0000269|PubMed:18539146, ECO:0000269|PubMed:20308323, ECO:0000269|PubMed:25851604, ECO:0000269|PubMed:31061526, ECO:0000269|PubMed:31328227, ECO:0000269|PubMed:31636962, ECO:0000269|PubMed:33428944, ECO:0000269|PubMed:34669960}.

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Molecular Weight: 14.2 kDa

UniProt: [Q9UI30](#)

## Application Details

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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.

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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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)