

Datasheet for ABIN3115048

## Solute Carrier Family 14 (Urea Transporter, Kidney) Member 2 (SLC14A2) (AA 1-920) protein (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	Solute Carrier Family 14 (Urea Transporter, Kidney) Member 2 (SLC14A2)
Protein Characteristics:	AA 1-920
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	Strep Tag
Application:	ELISA, SDS-PAGE (SDS), Western Blotting (WB)

### Product Details

Brand:	AlICE®
Sequence:	<p>MSDPHSSPLL PEPLSSRYKL YEAFTSPSW PSTSPDTHPA LP LLEMPEEK DLRSSNEDSH</p> <p>IVKIEKLNER SKRKDDGVAH RDSAGQRCIC LSKAVGYLTG DMKEYRIWLK DKHLALQFID</p> <p>WVLRGTAQVM FINNPLSGLI IFIGLLIQNP WWTITGGLGT VVSTLTALAL GQDRSAIASG</p> <p>LHGYNGMLVG LLMAVFSEKL DYYWWLLFPV TFTAMSCPVL SSALNSIFSK WDLPVFTLPF</p> <p>NIAVTLYLAA TGHYNLFFPT TLVEPVSSVP NITWTEMEMP LLLQAIPGVG GQVYGCDNPW</p> <p>TGGVFLVALF ISSPLICLHA AIGSIVGLLA ALSVATPFET IYTGLWSYNC VLSCIAIGGM</p> <p>FYALTWQTHL LALICALFCA YMEAAISNIM SVGVPPGTW AFCLATIIFL LLTTNNPAIF</p> <p>RLPLSKVTYP EANRIYYLTV KSGEEEKAPS GGGGEHPPTA GPKVEEGSEA VLSKHRSVFH</p> <p>IEWSSIRRRS KVFGEKGEHQE RQNKDPFPYR YRKPTVELLD LDTMEESSEI KVETNISKTS</p> <p>WIRSSMAASG KRVSALSYSI TGEMKECGEG LKDKSPVFQF FDWVLRGTSQ VMFVNNPLSG</p> <p>ILIILGLFIQ NPWWAISGCL GTIMSTLTAL ILSQDKSAIA AGFHGYNGVL VGLLMAVFSD</p>

KGDYYWLLLL PVIIMSMSCP ILSSALGTIF SKWDLPVFTL PFNITVTLYL AATGHYNLFF  
PTTLLQPASA MPNITWSEVQ VPLLLRAIPV GIGQVYGCDN PWTGGIFLIA LFISSPLICL  
HAAIGSTMGM LAALTIATPF DSIYFGLCGF NSTLACIAIG GMFYVITWQT HLLAIACALF  
AAYLGAALAN MLSVFGLPPC TWPFCLSALT FLLTTNNPA IYKLPLSKVT YPEANRIYYL  
SQERNRRASI ITKYQAYDVS

**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.**

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### 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.

## Product Details

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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

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Target:	Solute Carrier Family 14 (Urea Transporter, Kidney) Member 2 (SLC14A2)
Alternative Name:	SLC14A2 ( <a href="#">SLC14A2 Products</a> )
Background:	<p>Urea transporter 2 (Solute carrier family 14 member 2) (Urea transporter, kidney),FUNCTION: [Isoform 1]: Mediates the transport of urea driven by a concentration gradient across the cell membrane of the renal inner medullary collecting duct which is critical to the urinary concentrating mechanism. {ECO:0000269 PubMed:11502588, ECO:0000269 PubMed:17702749}., FUNCTION: [Isoform 2]: Mediates the transport of urea driven by a concentration gradient across the cell membrane of the kidney inner medullary collecting duct which is critical to the urinary concentrating mechanism. {ECO:0000269 PubMed:8647271, ECO:0000269 PubMed:8997401}.</p>
Molecular Weight:	101.2 kDa
UniProt:	<a href="#">Q15849</a>
Pathways:	<a href="#">Response to Water Deprivation</a>

## 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.
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</p>

## Application Details

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!

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 <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months