

# Datasheet for ABIN3131802

## NR1I2 Protein (AA 1-431) (Strep Tag)



#### Go to Product page

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Quantity:	1 mg
Target:	NR1I2
Protein Characteristics:	AA 1-431
Origin:	Mouse
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NR1I2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details	
Brand:	AliCE®
Sequence:	MRPEESWSRV GLVQCEEADS ALEEPINVEE EDGGLQICRV CGDKANGYHF NVMTCEGCKG
	FFRRAMKRNV RLRCPFRKGT CEITRKTRRQ CQACRLRKCL ESGMKKEMIM SDAAVEQRRA
	LIKRKKREKI EAPPPGGQGL TEEQQALIQE LMDAQMQTFD TTFSHFKDFR LPAVFHSGCE
	LPEFLQASLL EDPATWSQIM KDRVPMKISL QLRGEDGSIW NYQPPSKSDG KEIIPLLPHL
	ADVSTYMFKG VINFAKVISY FRDLPIEDQI SLLKGATFEM CILRFNTMFD TETGTWECGR
	LAYCFEDPNG GFQKLLLDPL MKFHCMLKKL QLHKEEYVLM QAISLFSPDR PGVVQRSVVD
	QLQERFALTL KAYIECSRPY PAHRFLFLKI MAVLTELRSI NAQQTQQLLR IQDSHPFATP
	LMQELFSSTD G
	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 posttranslational 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:	NR1I2
Alternative Name:	Nr1i2 (NR1I2 Products)
Background:	Nuclear receptor subfamily 1 group I member 2 (Orphan nuclear receptor PXR) (Pregnane X receptor),FUNCTION: Nuclear receptor that binds and is activated by a variety of endogenous and xenobiotic compounds. Transcription factor that activates the transcription of multiple genes involved in the metabolism and secretion of potentially harmful xenobiotics, endogenou compounds and drugs. Response to specific ligands is species-specific, due to differences in the ligand-binding domain. Binds to a response element in the promoters of the CYP3A4 and ABCB1/MDR1 genes (By similarity). Activated by naturally occurring steroids such as pregnenolone and progesterone, the cholesterol metabolite 5-beta-cholestane-3-alpha,7-alpha-triol, synthetic glucocorticoids and antiglucocorticoids and 16-alpha-carbonitrile (PCN). {ECO:0000250, ECO:0000269 PubMed:12569201, ECO:0000269 PubMed:19297428}.
Molecular Weight:	49.6 kDa
UniProt:	054915
Pathways:	Nuclear Receptor Transcription Pathway, Steroid Hormone Mediated Signaling Pathway
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.  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!
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