

Datasheet for ABIN3078001

CYP2A7 Protein (AA 1-494) (Strep Tag)



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Quantity:	1 mg
Target:	CYP2A7
Protein Characteristics:	AA 1-494
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP2A7 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details		
Brand:	AliCE®	
Sequence:	MLASGLLLVA LLACLTVMVL MSVWQQRKSR GKLPPGPTPL PFIGNYLQLN TEHICDSIMK	
	FSECYGPVFT IHLGPRRVVV LCGHDAVREA LVDQAEEFSG RGEQATFDWV FKGYGVAFSN	
	GERAKQLLRF AIATLRDFGV GKRGIEERIQ EESGFLIEAI RSTHGANIDP TFFLSRTVSN	
	VISSIVFGDR FDYEDKEFLS LLSMMLGIFQ FTSTSTGQLY EMFSSVMKHL PGPQQQAFKL	
	LQGLEDFIAK KVEHNQRTLD PNSPQDFIDS FLIHMQEEEK NPNTEFYLKN LMMSTLNLFI	
	AGTETVSTTL RYGFLLLMKH PEVEAKVHEE IDRVIGKNRQ PKFEDRTKMP YMEAVIHEIQ	
	RFGDVIPMSL ARRVKKDTKF RDFFLPKGTE VFPMLGSVLR DPSFFSNPQD FNPQHFLDDK	
	GQFKKSDAFV PFSIGKRNCF GEGLARMELF LFFTTVMQNF RLKSSQSPKD IDVSPKHVVF	
	ATIPRNYTMS FLPR	
	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 Details		
Target:	CYP2A7	
Alternative Name:	CYP2A7 (CYP2A7 Products)	
Background:	Cytochrome P450 2A7 (EC 1.14.14.1) (CYPIIA7) (Cytochrome P450 IIA4),FUNCTION: Cytochromes P450 are a group of heme-thiolate monooxygenases. In liver microsomes, this enzyme is involved in an NADPH-dependent electron transport pathway. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics.	
Molecular Weight:	56.4 kDa	
UniProt:	P20853	
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 product 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 Might differ depending on protein.	
Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	

Handling

Storage Comment:	Store at -80°C.
Expiry Date:	12 months