

# Datasheet for ABIN7562738

# CYP21A2 Protein (AA 1-487) (His tag)



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Quantity:	1 mg
Target:	CYP21A2
Protein Characteristics:	AA 1-487
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This CYP21A2 protein is labelled with His tag.

Product Details	
Purpose:	Custom-made recombinant Cyp21 Protein expressed in mammalian cells.
Sequence:	MLLPGLLLL LLLAGTRWLW GQWKLRKLHL PPLAPGFLHF LQPNLPIYLL GLTQKLGPIY
	RIRLGMQDVV VLNSNRTIEE ALIQKWVDFA GRPHMLNGKM DLDLSLGDYS LMWKAHKKLS
	RSALMLGMRD SMEPLIEQLT QEFCERMRAQ AGTPVAIHKE FSFLTCSIIS CLTFGDKDST
	LVQTLHDCVQ DLLQAWNHWS IQILTIIPLL RFLPNPGLQK LKQIQESRDH IVKQQLKQHK
	DSLVAGQWKD MIDYMLQGVE KQRDGKDEER LHEGHVHMSV VDLFIGGTET TATTLSWAVA
	FLLHHPEIQK RLQEELDLKL GPGSQLLYRN RMQLPLLMAT IAEVLRLRPV VPLALPHRAT
	RASSISGYDI PKDMVIIPNI QGANLDEMVW ELPSKFWPDR FLEPGKNPRT PSFGCGARVC
	LGEPLARLEL FVVLARLLQA FTLLPPPDGT LPSLQPQPYA GINLPIPPFQ VRLQPRNLAP QDQGERP
	Sequence without tag. The proposed Purification-Tag is based on experiences 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.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different

### **Product Details**

	isoform, please contact us regarding an individual offer.	
Characteristics:	Key Benefits:	
	<ul> <li>Made to order protein - from design to production - by highly experienced protein experts.</li> <li>Protein expressed in mammalian cells and purified in one-step affinity chromatography</li> <li>The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.</li> <li>State-of-the-art algorithm used for plasmid design (Gene synthesis).</li> </ul> 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.	
	If you are not interested in a full length protein, please contact us for individual protein fragments.	
	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.	
Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)	
Grade:	custom-made	
Target Details		
Target:	CYP21A2	
Alternative Name:	Cyp21 (CYP21A2 Products)	
Background:	Steroid 21-hydroxylase (EC 1.14.14.16) (21-OHase) (Cytochrome P-450c21) (Cytochrome P450 21) (Cytochrome P450 XXI) (Cytochrome P450-C21),FUNCTION: A cytochrome P450 monooxygenase that plays a major role in adrenal steroidogenesis. Catalyzes the hydroxylation at C-21 of progesterone and 17alpha-hydroxyprogesterone to respectively form 11-deoxycorticosterone and 11-deoxycortisol, intermediate metabolites in the biosynthetic pathway of mineralocorticoids and glucocorticoids. Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (CPR, NADPH-ferrihemoprotein reductase). {ECO:0000250 UniProtKB:P00191, ECO:0000250 UniProtKB:P08686}.	
	with two electrons provided by NADPH via cytochrome P450 reductase (CPR, NADPH-ferrihemoprotein reductase). {ECO:0000250 UniProtKB:P00191,	

## Target Details

Expiry Date:

12 months

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UniProt:	P03940  Metabolism of Steroid Hormones and Vitamin D, Steroid Hormone Biosynthesis, C21-Steroid Hormone Metabolic Process	
Pathways:		
Application Details		
Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for	
	functional studies yet we cannot offer a guarantee though.	
Restrictions:	For Research Use only	
Handling		
Format:	Liquid	
Buffer:	The buffer composition is at the discretion of the manufacturer.	
Handling Advice:	Avoid repeated freeze-thaw cycles.	
Storage:	-80 °C	
Storage Comment:	Store at -80°C.	