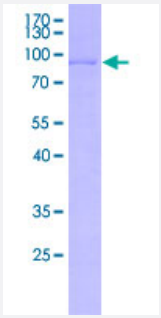
Full-Length

CYP21A2 (Human) Recombinant Protein (P01)

Catalog # H00001589-P01 Size 25 ug, 10 ug

Applications



Specification

Product Description	Human CYP21A2 full-length ORF (BAG37212.1, 1 a.a. - 495 a.a.) recombinant protein with GST tag at N-terminal.
Sequence	MLLLGLLLLLPLLAGARLLWNWWKLRSLHLPPLAPGFLHLLQPDLPIYLLGLTQKFGPIYRLHLGLQ DVVVLNSKRTIEEAMVKKWADFAGRPEPLTYKLVSRNYPDLSLGDYSLLWKAHKKLTRSALLLGIR DSMEPVVEQLTQEFCERMRAQPGTPVAIEEEFSLLTCSIICYLTFGDKIKDDNLMPAYYKCIQEVLK TWSHWSIQIVDVIPFLRFFPNPGLRRLKQAIEKRDHIVEMQLRQHKESLVAGQWRDMMDYMLQGV AQPSMEEGSGQLLEGHVHMAAVDLLIGGTETTANTLSWAVVFLLHHPEIQQRLQEELDHELGPGA SSSRVPYKDRARLPLLNATIAEVLRLRPVVPLALPHRTTRPSSISGYDIPEGTVIIPNLQGAHLDETV WERPHEFWPDRFLEPGKNSRALAFGCGARVCLGEPLARLELFVVLTRLLQAFTLLPSGDALPSL QPLPHCSVILKMQPFQVRLQPRGMGAHSPGQSQ
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	80.85
Interspecies Antigen Sequence	Mouse (71); Rat (70)
Preparation Method	*in vitro* wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue

Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — CYP21A2

Entrez GeneID	1589
GeneBank Accession#	AK314651.1
Protein Accession#	BAG37212.1
Gene Name	CYP21A2
Gene Alias	CA21H, CAH1, CPS1, CYP21, CYP21B, MGC150536, MGC150537, P450c21B
Gene Description	cytochrome P450, family 21, subfamily A, polypeptide 2
Omim ID	201910
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and hydroxylates steroids at the 21 position. Its activity is required for the synthesis of steroid hormones including cortisol and aldosterone. Mutations in this gene cause congenital adrenal hyperplasia. A related pseudogene is located near this gene; gene conversion events involving the functional gene and the pseudogene are thought to account for many cases of steroid 21-hydroxylase deficiency. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq

Other Designations	21-hydroxylase|OTTHUMP00000062684|cytochrome P450, family 21, subfamily A, polypepide 2| cytochrome P450, subfamily XXIA (steroid 21-hydroxylase, congenital adrenal hyperplasia), polyp eptide 2|dJ34F7.3 (cytochrome P450, subfamily XXIA (steroid 21-hydroxyla

Pathway

- C21-Steroid hormone metabolism
- Metabolic pathways

Disease

- Abortion
- Acne Vulgaris
- Adenoma
- Adrenal Gland Neoplasms
- Adrenal hyperplasia
- Adrenal Rest Tumor
- Arthritis
- Asperger Syndrome
- Atherosclerosis
- Autistic Disorder
- Autoimmune Diseases
- Birth Weight
- Cystic fibrosis
- Genetic Predisposition to Disease
- Glioblastoma
- Glioma
- Hirsutism
- Hyperandrogenism

- Hyperinsulinism
- Hyperplasia
- Hypertension
- Infant
- Insulin Resistance
- Leukemia
- Lymphoma
- Meningeal Neoplasms
- Meningioma
- Metabolic Syndrome X
- Metabolism
- Obesity
- Oligomenorrhea
- Opportunistic Infections
- Polycystic Ovary Syndrome
- Pregnancy Complications
- Puberty
- Recurrence
- Social Perception
- Virilism