



# Recombinant Human Steroid 21-hydroxylase (CYP21A2)

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| <b>Product Code</b>      | CSB-MP006400HU  |
| <b>Storage</b>           | Store at -20°C, for extended storage, conserve at -20°C or -80°C.   |
| <b>Uniprot No.</b>       | P08686  |
| <b>Product Type</b>      | Recombinant Protein   |
| <b>Immunogen Species</b> | Homo sapiens (Human)  |
| <b>Purity</b>            | >85% (SDS-PAGE)   |
| <b>Sequence</b>          | MLLLGLLLLLP LLAGARLLWN WWKLRSLHLP PLAPGFLHLL QPDLPIYLLG<br>LTQKFGPIYR LHLGLQDVVV LNSKRTIEEA MVKKWADFAG RPEPLTYKLV<br>SKNYPDLSLG DYSLLWKAHK KLTRSALLLG IRDSMEPVVE QLTQEFCEM<br>RAQPGTPVAI EEEFSLTCS IICYLTFGDK IKDDNLMPAY YKCIQEVLKT<br>WSHWSIQIVD VIPFLRFFPN PGLRRLKQAI EKRDHIVEMQ LRQHKESLVA<br>GQWRDMMDYM LQGVAQPSME EGSGQLLEGH VHMAAVDLLI<br>GGTETTANTL SWAVVFLHH PEIQRLQEE LDHELPGAS SSRVPYKDRA<br>RLPLLNTAIA EVLRLRPVVP LALPHRTTRP SSISGYDIPE GTVIIPNLQG<br>AHLDETVWER PHEFWPDRFL EPGKNSRALA FGCGARVCLG EPLARLELFV<br>VLTRLLQAFT LLPSGDALPS LQPLPHCSVI LKMQPFQVRL QPRGMGAHSP<br>GQNG   |
| <b>Source</b>            | Mammalian cell  |
| <b>Target Names</b>      | CYP21A2   |
| <b>Protein Names</b>     | Recommended name: Steroid 21-hydroxylase EC= 1.14.99.10 Alternative name(s): 21-OHase Cytochrome P-450c21 Cytochrome P450 21 Cytochrome P450 XXI Cytochrome P450-C21 Cytochrome P450-C21B   |
| <b>Expression Region</b> | 1-494   |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.   |
| <b>Tag Info</b>          | Tag type will be determined during the manufacturing process.   |
| <b>Protein Length</b>    | Full length protein   |
| <b>Target Details</b>    | 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. |



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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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**Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.