



# Recombinant Human Cytochrome P450 3A5 (CYP3A5)

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| <b>Product Code</b>      | CSB-MP006441HU                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage</b>           | Store at -20°C, for extended storage, conserve at -20°C or -80°C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Uniprot No.</b>       | P20815                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Product Type</b>      | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Immunogen Species</b> | Homo sapiens (Human)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>            | ≥85% (SDS-PAGE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Sequence</b>          | MDLIPNLAVE TWLLAVSLV LLYLYGTRTH GLFKRLGIPG PTPLPLLGNV<br>LSYRQGLWKF DTECYKKYGK MWGTYEGQLP VLAITDPDVI RTVLVKECYS<br>VFTNRRSLGP VGFMKSAISL AEDEEWKRIR SLLSPTFTSG KLKEMFPIIA<br>QYGDVLVRNL RREAEGKGPV TLKDIFGAYS MDVITGTSFG VNIDSLNNPQ<br>DPFVESTKKF LKFGFLDPLF LSILFPFLT PVFEALNVSL FPKDTINFLS<br>KSVNRMKKSRLNDKQKHRLD FLQLMIDSQN SKETESHKAL SDLELAAQSI<br>IFIFAGYETT SSVLSFTLYE LATHPDVQVK LQKEIDAVLP NKAPPTYDAV<br>VQMEYLDMMV NETLRLFPVA IRLERTCKKD VEINGVFIPK GSMVVIPTYA<br>LHHDPKYWTE PEEFRPERFS KKKDSIDPYI YTPFGTGPRN CIGMRFALMN<br>MKLALIRVLQ NFSFKPCKET QIPLKLDQTG LLQPEKPIVL KVDSRDGTLS GE                                                                                                                                                                                                                                   |
| <b>Source</b>            | Mammalian cell                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Target Names</b>      | CYP3A5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Protein Names</b>     | Recommended name: Cytochrome P450 3A5 EC= 1.14.14.1 Alternative name(s): CYP11A5 Cytochrome P450 HLp2 Cytochrome P450-PCN3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Expression Region</b> | 1-502                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <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, CYP3A5, 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 its expression is induced by glucocorticoids and some pharmacological agents. The enzyme metabolizes drugs such as nifedipine and cyclosporine as well as the steroid hormones testosterone, progesterone and androstenedione. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. This cluster includes a pseudogene, CYP3A5P1, which is very similar to CYP3A5. This similarity has caused some difficulty in determining whether cloned sequences represent the gene or the pseudogene. |
| <b>Reconstitution</b>    | 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.

### 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.