



Recombinant Human 25-hydroxyvitamin D-1 alpha hydroxylase, mitochondrial (CYP27B1), partial

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| Product Code | CSB-EP006406HU |
| Storage | Store at -20°C, for extended storage, conserve at -20°C or -80°C. |
| Uniprot No. | O15528 |
| Product Type | Recombinant Protein |
| Immunogen Species | Homo sapiens (Human) |
| Purity | >85% (SDS-PAGE) |
| Source | E.coli |
| Target Names | CYP27B1 |
| Protein Names | Recommended name: 25-hydroxyvitamin D-1 alpha hydroxylase, mitochondrial EC= 1.14.13.13 Alternative name(s): 25-OHD-1 alpha-hydroxylase 25-hydroxyvitamin D(3) 1-alpha-hydroxylase Short name= VD3 1A hydroxylase Calcidiol 1-mon |
| Expression Region | - |
| Notes | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| Tag Info | Tag type will be determined during the manufacturing process. |
| Protein Length | Partial |
| Target Details | 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 inner mitochondrial membrane where it hydroxylates 25-hydroxyvitamin D3 at the 1alpha position. This reaction synthesizes 1alpha,25-dihydroxyvitamin D3, the active form of vitamin D3, which binds to the vitamin D receptor and regulates calcium metabolism. Thus this enzyme regulates the level of biologically active vitamin D and plays an important role in calcium homeostasis. Mutations in this gene can result in vitamin D-dependent rickets type I. |
| 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. |
| 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. |