

## Recombinant Human CYP17A1, GST-tagged

Cat. No. CYP17A1-11763H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Human CYP17A1 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	160-508a.a.
<b>Description</b>	<p>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. It has both 17<math>\alpha</math>-hydroxylase and 17,20-lyase activities and is a key enzyme in the steroidogenic pathway that produces progestins, mineralocorticoids, glucocorticoids, androgens, and estrogens. Mutations in this gene are associated with isolated steroid-17 <math>\alpha</math>-hydroxylase deficiency, 17-<math>\alpha</math>-hydroxylase/17,20-lyase deficiency, pseudohermaphroditism, and adrenal hyperplasia.</p>
<b>Storage</b>	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
<b>Storage Buffer</b>	1M PBS (58mM Na <sub>2</sub> HPO <sub>4</sub> , 17mM NaH <sub>2</sub> PO <sub>4</sub> , 68mM NaCl, pH8. ) added with 100mM GSH and 1% Triton X-100, 15% glycerol.

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## GENE INFORMATION

**Gene Name** CYP17A1 cytochrome P450, family 17, subfamily A, polypeptide 1 [ Homo sapiens ]

**Official Symbol** CYP17A1

**Synonyms** CYP17A1; cytochrome P450, family 17, subfamily A, polypeptide 1; CYP17, cytochrome P450, subfamily XVII (steroid 17 alpha hydroxylase), adrenal hyperplasia; steroid 17-alpha-hydroxylase/17,20 lyase; CPT7; P450C17; S17AH; Steroid 17 alpha monooxygenase; CYPXVII; cytochrome P450c17; cytochrome P450-C17; cytochrome P450 17A1; cytochrome p450 XVIIA1; steroid 17-alpha-monooxygenase; cytochrome P450, subfamily XVII (steroid 17-alpha-hydroxylase), adrenal hyperplasia; CYP17;

**Gene ID** 1586

**mRNA Refseq** NM\_000102

**Protein Refseq** NP\_000093

**MIM** 609300

**UniProt ID** P05093

**Chromosome Location** 10q24.3

**Pathway** Androgen biosynthesis, organism-specific biosystem; Biological oxidations, organism-specific biosystem; C19/C18-Steroid hormone biosynthesis, pregnenolone => androstenedione => estrone, organism-specific biosystem; C19/C18-Steroid hormone biosynthesis, pregnenolone => androstenedione =>

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**Function**

electron carrier activity; heme binding; metal ion binding; monooxygenase activity; oxygen binding; steroid 17-alpha-monooxygenase activity;

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