

# **Product datasheet for TP310170M**

### OriGene Technologies, Inc.

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## Cytochrome P450 3A4 (CYP3A4) (NM\_017460) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human cytochrome P450, family 3, subfamily A, polypeptide 4

(CYP3A4), 100 µg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC210170 representing NM\_017460

or AA Sequence: Red=Cloning site Green=Tags(s)

MALIPDLAMETWLLLAVSLVLLYLYGTHSHGLFKKLGIPGPTPLPFLGNILSYHKGFCMFDMECHKKYGK VWGFYDGQQPVLAITDPDMIKTVLVKECYSVFTNRRPFGPVGFMKSAISIAEDEEWKRLRSLLSPTFTSG KLKEMVPIIAQYGDVLVRNLRREAETGKPVTLKDVFGAYSMDVITSTSFGVNIDSLNNPQDPFVENTKKL LRFDFLDPFFLSITVFPFLIPILEVLNICVFPREVTNFLRKSVKRMKESRLEDTQKHRVDFLQLMIDSQN SKETESHKALSDLELVAQSIIFIFAGYETTSSVLSFIMYELATHPDVQQKLQEEIDAVLPNKAPPTYDTV LQMEYLDMVVNETLRLFPIAMRLERVCKKDVEINGMFIPKGVVVMIPSYALHRDPKYWTEPEKFLPERFS KKNKDNIDPYIYTPFGSGPRNCIGMRFALMNMKLALIRVLQNFSFKPCKETQIPLKLSLGGLLQPEKPVV

LKVESRDGTVSGA

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV** 

Tag: C-Myc/DDK

Predicted MW: 57.2 kDa

**Concentration:**  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.



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Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 059488

**Locus ID:** 1576

UniProt ID: <u>P08684</u>, <u>Q6GRK0</u>

RefSeq Size: 2768
Cytogenetics: 7q22.1
RefSeq ORF: 1509

Synonyms: CP33; CP34; CYP3A; CYP3A3; CYPIIIA3; CYPIIIA4; HLP; NF-25; P450C3; P450PCN1; VDDR3

**Summary:** This gene encodes a member of the cytochrome P450 superfamily of enzymes. The

cytochrome P450 proteins are monooxygenases that 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. This enzyme is involved in the metabolism of approximately half the drugs in use today, including acetaminophen, codeine, cyclosporin A, diazepam, erythromycin, and chloroquine. The enzyme also metabolizes some steroids and carcinogens. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Previously another CYP3A gene, CYP3A3, was thought to exist; however, it is now thought that this sequence represents a transcript variant of CYP3A4. Alternatively spliced transcript variants encoding different

isoforms have been identified. [provided by RefSeq, Aug 2020]

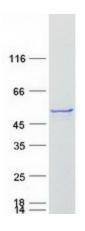
Protein Families: Druggable Genome, ES Cell Differentiation/IPS, P450, Transmembrane

**Protein Pathways:** Drug metabolism - cytochrome P450, Drug metabolism - other enzymes, Linoleic acid

metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol

metabolism

## **Product images:**



Coomassie blue staining of purified CYP3A4 protein (Cat# [TP310170]). The protein was produced from HEK293T cells transfected with CYP3A4 cDNA clone (Cat# [RC210170]) using MegaTran 2.0 (Cat# [TT210002]).