

Product datasheet for TP321636M

OriGene Technologies, Inc.

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Cytochrome P450 1A2 (CYP1A2) (NM 000761) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human cytochrome P450, family 1, subfamily A, polypeptide 2

(CYP1A2), 100 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC221636 representing NM_000761

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

MALSQSVPFSATELLLASAIFCLVFWVLKGLRPRVPKGLKSPPEPWGWPLLGHVLTLGKNPHLALSRMSQ RYGDVLQIRIGSTPVLVLSRLDTIRQALVRQGDDFKGRPDLYTSTLITDGQSLTFSTDSGPVWAARRRLA QNALNTFSIASDPASSSSCYLEEHVSKEAKALISRLQELMAGPGHFDPYNQVVVSVANVIGAMCFGQHFP ESSDEMLSLVKNTHEFVETASSGNPLDFFPILRYLPNPALQRFKAFNQRFLWFLQKTVQEHYQDFDKNSV RDITGALFKHSKKGPRASGNLIPQEKIVNLVNDIFGAGFDTVTTAISWSLMYLVTKPEIQRKIQKELDTV IGRERRPRLSDRPQLPYLEAFILETFRHSSFLPFTIPHSTTRDTTLNGFYIPKKCCVFVNQWQVNHDPEL WEDPSEFRPERFLTADGTAINKPLSEKMMLFGMGKRRCIGEVLAKWEIFLFLAILLQQLEFSVPPGVKVD

LTPIYGLTMKHARCEHVQARLRFSIN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 58.2 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.



RefSeq ORF:

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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 000752

1544 Locus ID: **UniProt ID:** P05177 RefSeg Size: 3127 Cytogenetics: 15q24.1

1548 Synonyms: CP12; CYPIA2; P3-450; P450(PA)

Summary: 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. The protein encoded by this gene localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. Other xenobiotic substrates for this enzyme include caffeine, aflatoxin B1, and acetaminophen. The transcript from this gene contains four Alu sequences flanked by direct repeats in the 3' untranslated region. [provided by RefSeq, Jul 2008]

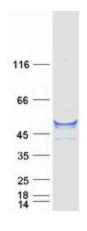
Protein Families: Druggable Genome, P450, Transmembrane

Protein Pathways: Caffeine metabolism, Drug metabolism - cytochrome P450, Linoleic acid metabolism,

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

Tryptophan metabolism

Product images:



Coomassie blue staining of purified CYP1A2 protein (Cat# [TP321636]). The protein was produced from HEK293T cells transfected with CYP1A2 cDNA clone (Cat# [RC221636]) using MegaTran 2.0 (Cat# [TT210002]).