

Product datasheet for PH321636

Cytochrome P450 1A2 (CYP1A2) (NM_000761) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	CYP1A2 MS Standard C13 and N15-labeled recombinant protein (NP_000752)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC221636
Predicted MW:	58.2 kDa
Protein Sequence:	>RC221636 representing NM_000761 Red=Cloning site Green=Tags(s)

MALSQSVFPSATELLLASAIFCLVFWVLKGLRPRVPKGLKSPPEPWGWPLLGHVLTGKNPHLALSRMSQ
RYGDVLQIRIGSTPVLVLSRLDIRQALVRQGDDFKGRPDLYTSTLITDGQSLTFSTDSGPVWAARRRLA
QNALNTFSIASDPASSSSCYLEEHSKEAKALISRLQELMAGPGHFDYPNQVVVSVANVIGAMCFGQHFP
ESSDEMLSLVKNTHFVETASSGNPLDFPILRYLPNPALQRFKAFNQRFWFLQKTVQEHYQDFDKNSV
RDITGALFKHKKGPRASGNLIPQEKIVNLVNDIFGAGFDVTTAISWSLMYLVTKPEIQRKIQKELDTV
IGRERRPRLSDRPQLPYLEAFILETFRHSSFLPFTIPHSTTRDTTLNGFYIPKCCVFVNQWQVNHDP
WEDPSEFRPERFLTADGTAINKPLSEKMMLFGMGKRRRCIGEVLAKEIFLFLAILLQQLFVPPGVKVD
LTPYIYGLTMKHARCEHVQARLRFSIN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_000752
RefSeq Size:	3127
RefSeq ORF:	1548



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

Locus ID: 1544

UniProt ID: [P05177](#)

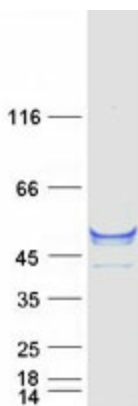
Cytogenetics: 15q24.1

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]).