

## Product datasheet for **TA501244M**

### Cytochrome P450 1A2 (CYP1A2) Mouse Monoclonal Antibody [Clone ID: OTI2C6]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI2C6
Applications:	FC, IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150, FLOW 1:100
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human CYP1A2 (NP_000752) produced in HEK293T cell.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.7 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	58.2 kDa
Gene Name:	cytochrome P450 family 1 subfamily A member 2
Database Link:	<a href="#">NP_000752</a> <a href="#">Entrez Gene 1544 Human</a> <a href="#">P05177</a>

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**Background:**

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.

**Synonyms:**

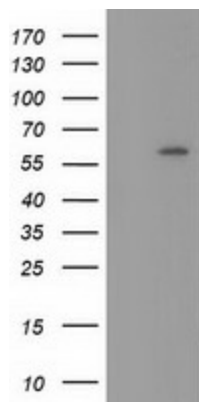
CP12; P3-450; P450(PA)

**Protein Families:**

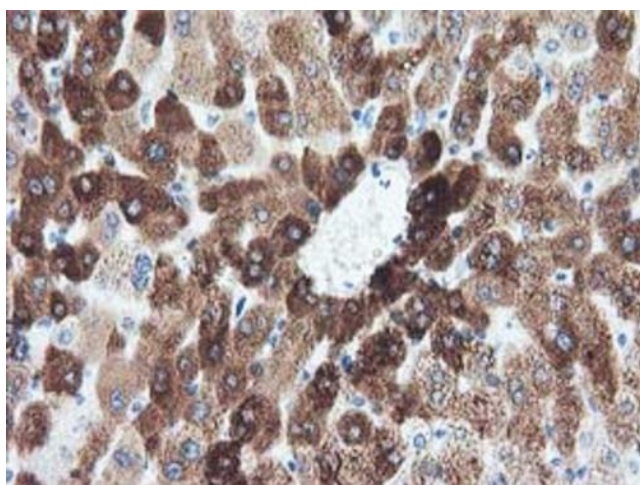
Druggable Genome, P450, Transmembrane

**Protein Pathways:**

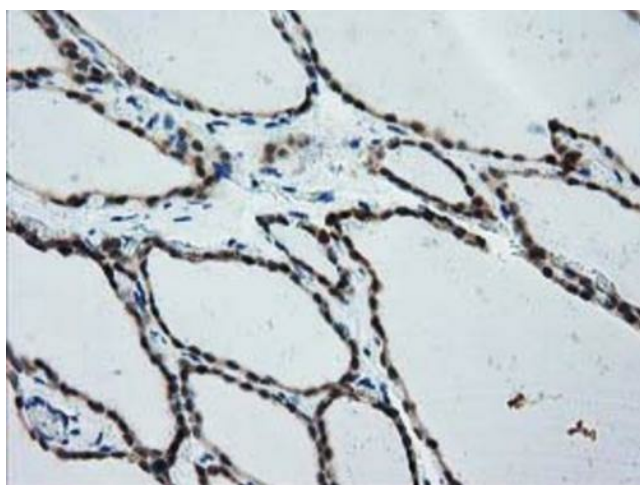
Caffeine metabolism, Drug metabolism - cytochrome P450, Linoleic acid metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol metabolism, Tryptophan metabolism

**Product images:**


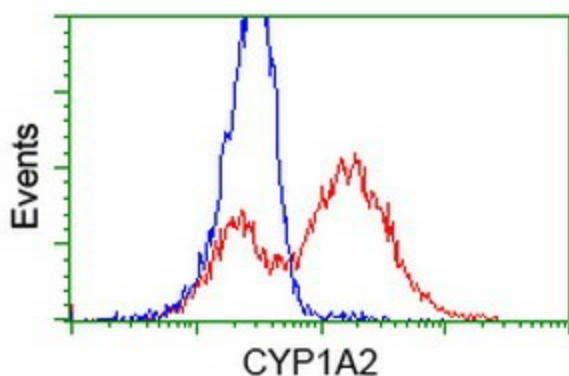
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CYP1A2 ([RC221636], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CYP1A2. Positive lysates [LY424529] (100ug) and [LC424529] (20ug) can be purchased separately from OriGene.



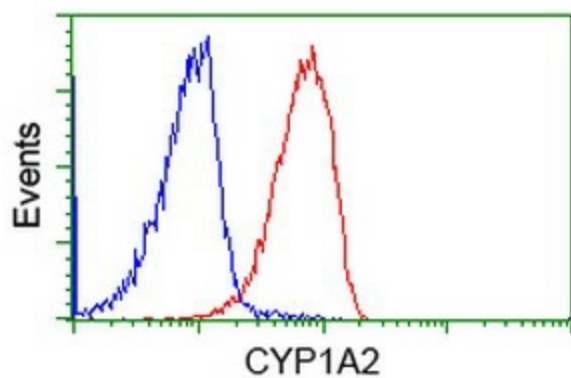
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-CYP1A2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human thyroid tissue within the normal limits using anti-CYP1A2 mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



HEK293T cells transfected with either [RC221636] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-CYP1A2 antibody ([TA501244]), and then analyzed by flow cytometry.



Flow cytometric Analysis of Jurkat cells, using anti-CYP1A2 antibody ([TA501244]), (Red), compared to a nonspecific negative control antibody (TA50011), (Blue).