

#### Product datasheet for TA501173AM

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Cytochrome P450 1A2 (CYP1A2) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI7D12]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI7D12

**Applications:** FC, IF, IHC, WB

**Recommended Dilution:** WB 1:2000, IHC 1:50, IF 1:100, FLOW 1:100

Reactivity: Human
Host: Mouse
Isotype: IgG2b

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:** 0.5 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Biotin

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: NP 000752

Entrez Gene 1544 Human

P05177





### Cytochrome P450 1A2 (CYP1A2) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI7D12] – TA501173AM

**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)

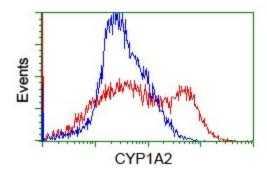
**Protein Families:** Druggable Genome, P450, Transmembrane

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

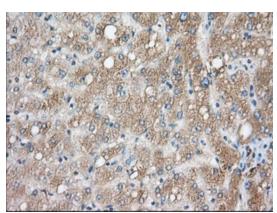
Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol metabolism,

Tryptophan metabolism

### **Product images:**

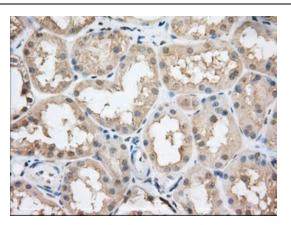


HEK293T cells transfected with either [RC221636] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-CYP1A2 antibody ([TA501173]), and then analyzed by flow cytometry.

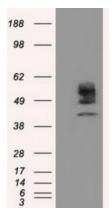


Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-CYP1A2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501173], Dilution 1:50)

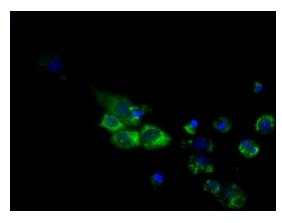
## Cytochrome P450 1A2 (CYP1A2) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI7D12] – TA501173AM



Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-CYP1A2 mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA501173], Dilution 1:50)

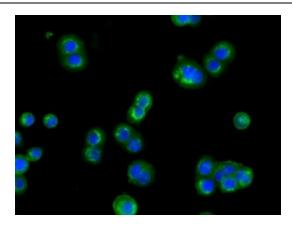


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY CYP1A2 ([RC221636], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CYP1A2. Positive lysates [LY424529] (100ug) and [LC424529]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



Anti-CYP1A2 mouse monoclonal antibody ([TA501173]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY CYP1A2 ([RC221636]).

# Cytochrome P450 1A2 (CYP1A2) Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI7D12] – TA501173AM



Immunofluorescent staining of HT29 cells using anti-CYP1A2 mouse monoclonal antibody ([TA501173]).