

## **Product datasheet for AM05371PU-N**

#### OriGene Technologies, Inc.

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### Cytochrome P450 1A2 (CYP1A2) Mouse Monoclonal Antibody [Clone ID: 3B8C1]

### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 3B8C1
Applications: IHC, WB

**Recommended Dilution:** Western Blot: 1 - 2 μg/ml.

Immunohistochemistry: 1 - 5 μg/ml.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with rat

cytochrome p450 proteins and mouse myeloma Ag8563 cells.

**Specificity:** This antibody reacts to Cytochrome P450 1A2.

**Formulation:** Phosphate buffered saline with 0.08% sodium azide

State: Purified

State: Liquid purified Ig

Concentration: lot specific

Conjugation: Unconjugated

conjugation.

**Storage:** The antibody can be shipped at ambient temperature. Store (in aliquots) at -20°C only.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Gene Name:** cytochrome P450 family 1 subfamily A member 2

Database Link: Entrez Gene 1544 Human

P05177





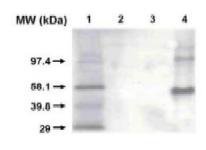
### Background:

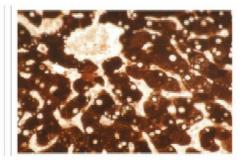
P450 enzymes constitute a family of monooxygenase enzymes that are involved in the metabolism of a wide array of endogenous and xenobiotic compounds. Several P450 enzymes have been classified by sequence similarities as members of the CYP1A and CYP2A subfamilies. NADPH cytochrome 450 reductase is a microsomal enzyme responsible for the transfer of electrons from NADPH to cytochrome P450 enzymes during the P450 catalytic cycle. NADPH cytochrome P450 reductase is localized to the endoplasmic reticulum where it is also able to transfer electrons to heme oxygenase and cytochrome  $\beta 5$ . NADPH cytochrome P450 reductase is structurally related to two separate flavoprotein families, ferredoxin nucleotide reductase (FNR) and flavodoxin. Electron transfer of NADPH cytochrome P450 reductase requires the binding of two flavin cofactors, FAD and FMN, to the FNR and flavodoxin domains, respectively.

Synonyms:

Cytochrome P450 1A2, CYPIA2, Cytochrome P450-P3, Cytochrome P(3)450, Cytochrome P450 4

# **Product images:**





Left: Western blot using CYP1A2 antibody on recombinant (2) CYP1B1, (3) CYP1A1 and (4) CYP1A2 (0.5 pmol per lane). Right: Immunohistochemical staining of formalin-fixed, paraffin-embedded normal human liver tissue section.