

# **Product datasheet for AP20396PU-N**

#### 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

OriGene Technologies, Inc.

## CYP1A1 (+CYP1A2) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immuofluorescence: 1/50-1/200.

**Immunohistochemistry on Paraffin Sections:** 1/50-1/200.

Reactivity: Human, Mouse, Rat

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 71-120 of Human CYP1A1.

**Specificity:** This antibody detects endogenous levels of CYP1A1/2 protein.

(region surrounding Arg98)

**Formulation:** Phosphate buffered saline (PBS), pH~7.2

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).

Preservative: 0.05% Sodium Azide

Concentration: 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen.

**Conjugation:** Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

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

**Predicted Protein Size:** ~ 58 kDa

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

Database Link: Entrez Gene 13076 MouseEntrez Gene 24296 RatEntrez Gene 1543 Human

P04798





#### Background:

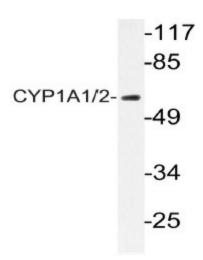
P450 enzymes constitute a family of monooxygenase enzymes that are involved in the metabolism of a wide array of endogenous and xenobiotic compounds. Several P450 enzymes have been classified by sequence similarities as members of the CYP1A and CYP2A subfamilies. NADPH cytochrome P450 reductase is a 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 beta5. 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 1A1, Cytochrome P450-P1, Cytochrome P450 form 6, Cytochrome P450-C

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

**Protein Pathways:** Metabolism of xenobiotics by cytochrome P450, Retinol metabolism, Tryptophan metabolism

### **Product images:**



Western blot (WB) analysis of CYP1A1/2 antibody in extracts from RAW264.7 cells.