

Datasheet for ABIN6239867

**CYP1A1 Protein (AA 251-521) (His tag,GST tag)**[Go to Product page](#)**1** Image

## Overview

Quantity:	50 µg
Target:	CYP1A1
Protein Characteristics:	AA 251-521
Origin:	Rat
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This CYP1A1 protein is labelled with His tag,GST tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

## Product Details

Characteristics:	Tag location: N-terminal His and GST Tag
Purity:	> 95 %
Biological Activity Comment:	Cytochrome P450 1A1 (CYP1A1) is a member of Cytochromes P450 superfamily of enzymes. Cytochromes P450 are a group of heme-thiolate monooxygenases. It oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. CYP1A1 is also known as AHH (aryl hydrocarbon hydroxylase). It is involved in the metabolic activation of aromatic hydrocarbons (polycyclic aromatic hydrocarbons, PAH). Besides, Heat Shock 70kDa Protein 4 (HSPA4) has been identified as an interactor of CYP1A1, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat CYP1A1 and recombinant rat HSPA4. Briefly, CYP1A1 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to HSPA4-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-CYP1A1 pAb, then

## Product Details

aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of CYP1A1 and HSPA4 was shown in Figure 1, and this effect was in a dose dependent manner. The binding activity of CYP1A1 with HSPA4

## Target Details

Target:	CYP1A1
Alternative Name:	Cytochrome P450 1A1 (CYP1A1) ( <a href="#">CYP1A1 Products</a> )
Background:	Alternative Names: CYP1, AHH, AHRR, CP11, CYP1, P1-450, P450-C, P450DX, Cytochrome P450, Subfamily I (Aromatic Compound-Inducible), Polypeptide 1
Molecular Weight:	62kDa
UniProt:	<a href="#">P00185</a>
Pathways:	<a href="#">Steroid Hormone Biosynthesis</a> , <a href="#">Regulation of Lipid Metabolism by PPARalpha</a>

## Application Details

Application Notes:	Isoelectric Point: 6.8
Restrictions:	For Research Use only

## Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

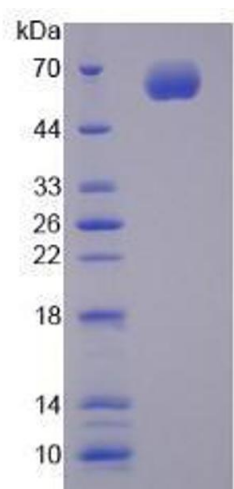


Image 1.