

Cytochrome P450 1A2 (CYP1A2) Active Protein | CYP1A2 active protein

Active Cytochrome P450 1A2 (CYP1A2)

CATALOG # AAA148207	HOST E Coli	REACTIVITY Human	APPLICATIONS Activity Assay, Cell Culture
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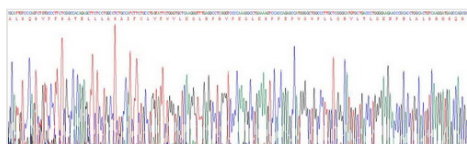
PRODUCT SYNONYMS

Cytochrome P450 1A2 (CYP1A2); Active Cytochrome P450 1A2 (CYP1A2); CP12; P3-450; P450(PA); Cytochrome P450; Family 1; Subfamily A; Polypeptide 2; CYP1A2 active protein

PRODUCT SPECIFICATIONS

Host	E Coli
Reactivity	Human
Purity/Purification	> 95%
Form/Format	Freeze-dried powder
Sequence Length	516
Applicable Applications for CYP1A2 active protein	Activity Assay, Cell Culture
Tag	N-terminal His and GST Tag
Buffer Formulation	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Fragment	Ala2~Ser231
Isoelectric Point	8

IMAGES



Application Data

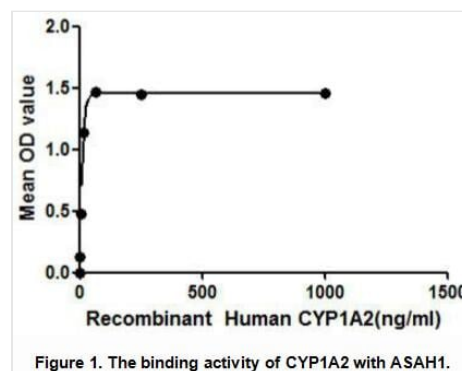
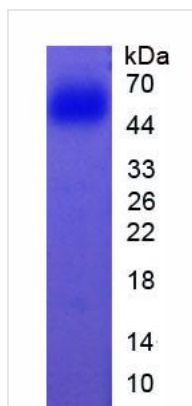


Figure 1. The binding activity of CYP1A2 with ASAHI.

Application Data



SDS-PAGE

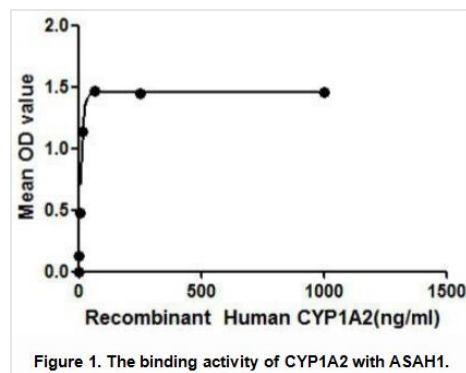


Figure 1. The binding activity of CYP1A2 with ASAHI.

Activity

CYP1A2 (Cytochrome P450 1A2) belongs to the group of proteins which contains heme as a cofactor. CYP1A2 oxidizes a variety of structurally unrelated compounds, including steroids, fatty acids, and xenobiotics. Besides, ASAHI (Acid ceramidase) has been identified as an interactor of CYP1A2 through affinity capture-MS. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human CYP1A2 and recombinant human ASAHI. Briefly, CYP1A2 were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to ASAHI-coated microtiter wells and incubated for 2h at 37 degree C. Wells were washed with PBST and incubated for 1h with anti-CYP1A2 mAb, then 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 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of CYP1A2 and ASAHI was shown in Figure 1, and this effect was in a dose dependent manner.

ADDITIONAL INFORMATION

Product Categories/Family for CYP1A2 active protein	Metabolic pathway
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NCBI AND UNIPROT INFORMATION

NCBI GI #	73915100
NCBI GeneID	1544
NCBI Accession #	NP_000752.2
NCBI GenBank Nucleotide #	NM_000761.4
UniProt Accession #	P05177; Q16754; Q6NWU5; Q9BXX7; Q9UK49
Molecular Weight	Predicted Molecular Weight: 55.2kDa Accurate Molecular Weight: 55kDa
NCBI Official Full Name	cytochrome P450 1A2
NCBI Official Synonym Full Names	cytochrome P450 family 1 subfamily A member 2
NCBI Official Symbol	CYP1A2
NCBI Official Synonym Symbols	CP12; CYPIA2; P3-450; P450(PA)
NCBI Protein Information	cytochrome P450 1A2
UniProt Protein Name	Cytochrome P450 1A2
UniProt Gene Name	CYP1A2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.