

Human Cytochrome P450 1A2 (CYP1A2) Protein (Active)

Catalogue No.:abx651319



Cytochrome P450 1A2 (CYP1A2) Protein (Active) is an active protein from Human.

Target:	Cytochrome P450 1A2 (CYP1A2)
Origin:	Human
Expression:	Recombinant



Tested Applications: WB, SDS-PAGE

Host:	E. coli
Conjugation:	Unconjugated
Form:	Lyophilized
Purity:	> 95%
Reconstitution:	Reconstitute in ddH_2O to a concentration of 0.1-1.0 mg/ml. Do not vortex.
Storage:	Store at 2-8 °C for up to one month. Store at -80 °C for up to one year. Avoid repeated freeze/thaw cycles.
UniProt Primary AC:	P05177 (<u>UniProt</u> , <u>ExPASy</u>)
KEGG:	hsa:1544
String:	9606.ENSP00000342007
Molecular Weight:	Calculated MW: 55.2 kDa
	Observed WW. 55 KDa
Sequence Fragment:	Ala2-Ser231
Sequence Fragment: Sequence:	Ala2-Ser231 ALSQSVPFS ATELLLASAI FCLVFWVLKG LRPRVPKGLK SPPEPWGWPL LGHVLTLGKN PHLALSRMSQ RYGDVLQIRI GSTPVLVLSR LDTIRQALVR QGDDFKGRPD LYTSTLITDG QSLTFSTDSG PVWAARRRLA QNALNTFSIA SDPASSSSCY LEEHVSKEAK ALISRLQELM AGPGHFDPYN QVVVSVANVI GAMCFGQHFP ESSDEMLSLV KNTHEFVETA S
Sequence Fragment: Sequence: Tag:	Ala2-Ser231 ALSQSVPFS ATELLLASAI FCLVFWVLKG LRPRVPKGLK SPPEPWGWPL LGHVLTLGKN PHLALSRMSQ RYGDVLQIRI GSTPVLVLSR LDTIRQALVR QGDDFKGRPD LYTSTLITDG QSLTFSTDSG PVWAARRRLA QNALNTFSIA SDPASSSSCY LEEHVSKEAK ALISRLQELM AGPGHFDPYN QVVVSVANVI GAMCFGQHFP ESSDEMLSLV KNTHEFVETA S N-terminal His tag and GST tag
Sequence Fragment: Sequence: Tag: Buffer:	Ala2-Ser231 ALSQSVPFS ATELLLASAI FCLVFWVLKG LRPRVPKGLK SPPEPWGWPL LGHVLTLGKN PHLALSRMSQ RYGDVLQIRI GSTPVLVLSR LDTIRQALVR QGDDFKGRPD LYTSTLITDG QSLTFSTDSG PVWAARRRLA QNALNTFSIA SDPASSSSCY LEEHVSKEAK ALISRLQELM AGPGHFDPYN QVVVSVANVI GAMCFGQHFP ESSDEMLSLV KNTHEFVETA S N-terminal His tag and GST tag Prior to lyophilization: 100 mM NaHCO ₃ , 500 mM NaCl, pH 8.3, containing 0.01% Sarcosyl, 5% Trehalose.



Biological Activity: Cytochrome P450 1A2 (CYP1A2) 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. Acid Ceramidase (ASAH1) 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 ASAH1. Briefly, CYP1A2 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to ASAH1-coated microplate wells and incubated for 2 h at 37°C. Wells were washed with PBST and incubated for 1 h with anti-CYP1A2 monoclonal antibody, then aspirated and washed 3 times. After incubation with HRP-conjugated secondary antibody, wells were aspirated and washed 3 times. TMB substrate solution was added and wells were incubated for 15-25 minutes at 37 °C. Finally, 50 µl stop solution was added to the wells and the absorbance was read at 450 nm immediately. The binding activity of CYP1A2 and ASAH1 is shown in Figure 4.

Concentration:

Prior to lyophilization: 200 µg/ml

Note: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC, THERAPEUTIC OR COSMETIC PROCEDURES. NOT FOR HUMAN OR ANIMAL CONSUMPTION.