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Product Datasheet

Rat CYP1A1 protein, His and GST tag, Unconjugated
GTX00355-PRO

Article Name	Rat CYP1A1 protein, His and GST tag, Unconjugated
Biozol Catalog Number	GTX00355-PRO
Supplier Catalog Number	GTX00355-pro
Alternative Catalog Number	GTX00355-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Rat
Conjugation	Unconjugated
NCBI	24296
UniProt	P00185
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	N-terminal His and GST-Tag, Ser251~His521 (NP_036672.2)

Application Notes	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 100 µl were then transferred to HSPA4-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-CYP1A1 pAb, 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 37C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of of CYP1A1 and HSPA4 was in a dose dependent manner.