For Research Use Only

CYP51A1 Polyclonal antibody

Catalog Number: 13431-1-AP

Featured Product

27 Publications



Basic Information

 Catalog Number:
 GenBank Accession Number:

 13431-1-AP
 BC032322

 Size:
 GeneID (NCBI):

 500 ug/ml
 1595

 Source:
 UNIPROT ID:

Rabbit Q16850
Isotype: Full Name:

lgG cytochrome P450, family 51, Immunogen Catalog Number: subfamily A, polypeptide 1

AG4235 Calculated MW:

509 aa, 57 kDa Observed MW: 55 kDa Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:1000-1:5000 IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate

Applications

Tested Applications: WB, IP, ELISA Cited Applications: WB, IHC, IF Species Specificity: human, mouse, rat

Cited Species:

human, mouse, rat, chicken, hamster

Positive Controls:

WB: HeLa cells, mouse testis tissue, rat liver tissue,

HuH-7 cells

IP: mouse testis tissue, mouse heart tissue

Background Information

Lanosterol 14-alpha demethylase (cytochrome P450(51), CYP51A1) belongs to the evolutionarily conserved family of cytochrome P450 and catalyzes one of the key steps in cholesterol biosynthesis. CYP51A1 protein is targeted for degradation when exposed to nitric oxide generated under inflammatory conditions by NOS2 or released from NO donor compounds (PMID: 28830911). CYP51A1 is a prognostic marker in certain cancers, including Cervical squamous cell carcinoma, Head and neck squamous cell carcinoma, Kidney chromophobe, and Kidney renal clear cell carcinoma (PMID: 24711211).

Notable Publications

Author	Pubmed ID	Journal	Application
Michael L van de Weijer	33065021	Mol Cell	WB
Leigh Goedeke	34750386	Nat Commun .	WB
Michael L van de Weijer	32738194	Mol Cell	WB

Storage

Storage:

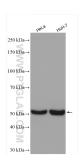
Store at -20°C. Stable for one year after shipment.

Storage Buffer

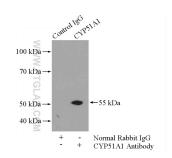
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

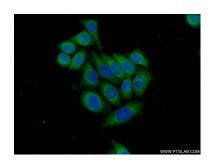
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 13431-1-AP (CYP51A1 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



IP result of anti-CYP51A1 (IP:13431-1-AP, 4ug; Detection:13431-1-AP 1:1000) with mouse testis tissue lysate 2800ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed PC-3 cells using 13431-1-AP (CYP51A1 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).