

CYP2A13 Polyclonal Antibody

Catalog No: YT1203

Reactivity: Human; Rat; Mouse;

Applications: WB;IHC;IF;ELISA

Target: CYP2A13

Fields: >>Metabolism of xenobiotics by cytochrome P450;>>Chemical carcinogenesis -

DNA adducts

Q16696

Gene Name: CYP2A13

Protein Name: Cytochrome P450 2A13

Human Gene Id: 1553

Human Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

Cytochrome P450 2A13. AA range:311-360

Specificity: CYP2A13 Polyclonal Antibody detects endogenous levels of CYP2A13 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

Dilution: WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:20000. Not

yet tested in other applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

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Observed Band: 56kD

Cell Pathway : Caffeine metabolism;Retinol metabolism;Drug metabolism;Drug metabolism;

Background: cytochrome P450 family 2 subfamily A member 13(CYP2A13) Homo sapiens

This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum. Although its endogenous substrate has not been determined, it is known to metabolize 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone, a major nitrosamine specific to tobacco. This gene is part of a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19g. [provided by

RefSeq, Jul 2008],

Function : catalytic activity:RH + reduced flavoprotein + O(2) = ROH + oxidized

flavoprotein + H(2)O.,cofactor:Heme group.,function:Exhibits a coumarin

7-hydroxylase activity. Active in the metabolic activation of

hexamethylphosphoramide, N,N-dimethylaniline, 2'-methoxyacetophenone, N-

nitrosomethylphenylamine, and the tobacco-specific carcinogen,

4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone.,online information:CYP2A13 alleles,polymorphism:The frequencies of the Cys-257 allele in white, black, Hispanic, and Asian individuals are 1.9%, 14.4%, 5.8%, and 7.7%, respectively. The Cys-257 variant is 37 to 56% less active than the wild-type Arg-257 protein

toward all substrates tested.,similarity:Belongs to the cytochrome P450

family.,tissue specificity:Expressed in liver and a number of extrahepatic tissues, including nasal mucosa, lung, trachea, brain, mammary gland, prostate, testis,

and uterus, but n

Subcellular Location : Endoplasmic reticulum membrane; Peripheral membrane protein. Microsome

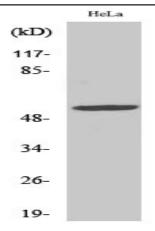
membrane; Peripheral membrane protein.

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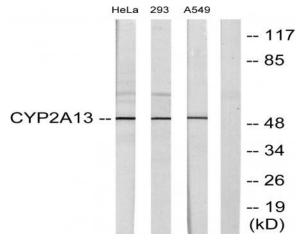
mucosa, lung, trachea, brain, mammary gland, prostate, testis, and uterus, but not in heart, kidney, bone marrow, colon, small intestine, spleen, stomach,

thymus, or skeletal muscle.

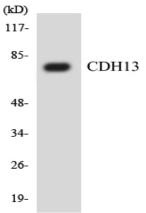
Products Images



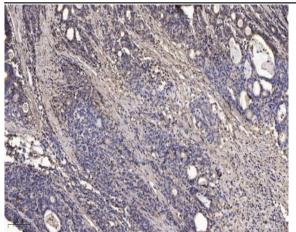
Western Blot analysis of various cells using CYP2A13 Polyclonal Antibody diluted at 1:2000



Western blot analysis of lysates from HeLa, 293, and A549 cells, using Cytochrome P450 2A13 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HT-29 cells using CDH13 antibody.



Immunohistochemical analysis of paraffin-embedded human Gastric adenocarcinoma. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).