Product Name: DPYD Rabbit Polyclonal Antibody
Catalog #: APRab10142

Summary

Production Name	DPYD Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	DPYD
Alternative Names	DPYD; Dihydropyrimidine dehydrogenase [NADP(+)]; DHPDHase; DPD; Dihydrothymine dehydrogenase; Dihydrouracil dehydrogenase
Gene ID	1806.0
SwissProt ID	Q12882.The antiserum was produced against synthesized peptide derived from the Internal region of human DPYD. AA range:351-400

Application

Dilution Ratio	WB 1:500 - 1:2000. IHC: 1:100-300 ELISA: 1:20000..
Molecular Weight	120kD

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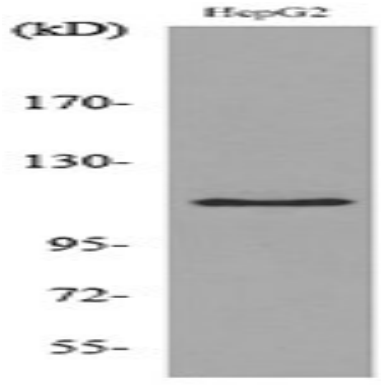
Background

The protein encoded by this gene is a pyrimidine catabolic enzyme and the initial and rate-limiting factor in the pathway of uracil and thymidine catabolism. Mutations in this gene result in dihydropyrimidine dehydrogenase deficiency, an error in pyrimidine metabolism associated with thymine-uraciluria and an increased risk of toxicity in cancer patients receiving 5-fluorouracil chemotherapy. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009],catalytic activity:5,6-dihydrouracil + NADP(+) = uracil + NADPH.,cofactor:Binds 2 4Fe-4S clusters. Contains approximately 33 iron atoms per molecule.,cofactor:Binds 2 FAD.,cofactor:Binds 2 FMN.,disease:Defects in DPYD are the cause of dihydropyrimidine dehydrogenase deficiency (DPYD deficiency) [MIM:274270]; also known as hereditary thymine-uraciluria or familial pyrimidinemia. DPYD deficiency is a disease characterized by persistent urinary excretion of excessive amounts of uracil, thymine and 5-hydroxymethyluracil. Patients suffering from this disease show a severe reaction to the anticancer drug 5-fluorouracil. This reaction includes stomatitis, Leukopenia, thrombocytopenia, hair loss, diarrhea, fever, marked weight loss, cerebellar ataxia, and neurologic symptoms, progressing to semicoma.,function:Involved in pyrimidine base degradation. Catalyzes the reduction of uracil and thymine. Also involved the degradation of the chemotherapeutic drug 5-fluorouracil.,pathway:Amino-acid biosynthesis; beta-alanine biosynthesis.,similarity:Belongs to the dihydropyrimidine dehydrogenase family.,similarity:Contains 3 4Fe-4S ferredoxin-type domains.,subunit:Homodimer.,tissue specificity:Found in most tissues with greatest activity found in liver and peripheral blood mononuclear cells.,

Research Area

Pyrimidine metabolism;beta-Alanine metabolism;Pantothenate and CoA biosynthesis;Drug metabolism;

Image Data



Western blot analysis of lysate from HepG2 cells, using DPYD Antibody.

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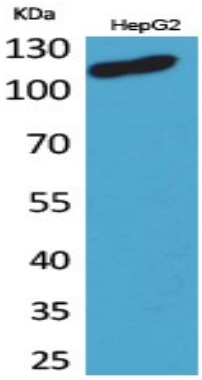
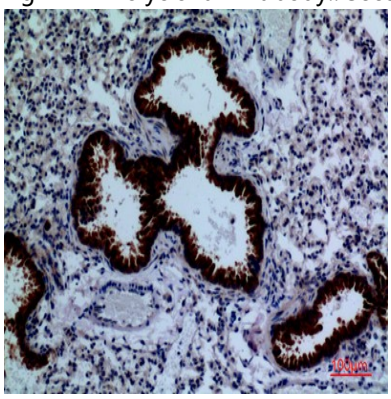
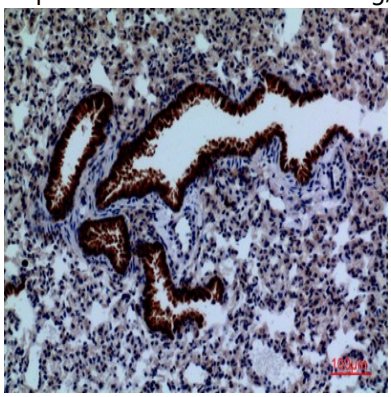


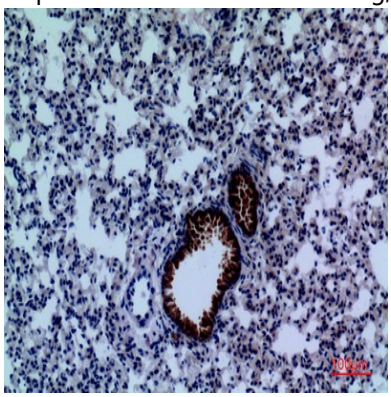
Western Blot analysis of HepG2 cells using DPYD Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded mouse-lung, antibody was diluted at 1:100



Immunohistochemical analysis of paraffin-embedded mouse-lung, antibody was diluted at 1:100



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Immunohistochemical analysis of paraffin-embedded mouse-lung, antibody was diluted at 1:100

Note

For research use only.