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Anti-DPYD Antibody

Catalog # ABO11070

Product Information

Application	WB
Primary Accession	Q12882
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Dihydropyrimidine dehydrogenase[NADP(+)](DPYD) detection. Tested with WB in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	1806
Other Names	Dihydropyrimidine dehydrogenase [NADP(+)], DHPDHase, DPD, 1.3.1.2, Dihydrothymine dehydrogenase, Dihydrouracil dehydrogenase, DPYD
Calculated MW	111401
Application Details	Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Cytoplasm.
Tissue Specificity	Found in most tissues with greatest activity found in liver and peripheral blood mononuclear cells.
Source	Eukaryota
Protein Name	Dihydropyrimidine dehydrogenase [NADP(+)](DHPDHase/DPD)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human DPYD(33-52aa AKKLDKKHWKRNPDKNCFNC), different from the related rat and mouse sequences by one amino acid.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins

Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the dihydropyrimidine dehydrogenase family.

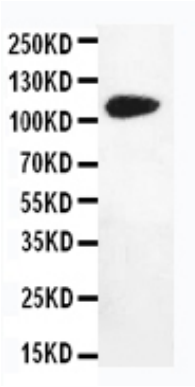
Protein Information

Name	DPYD (HGNC:3012)
Function	Involved in pyrimidine base degradation (PubMed: 1512248). Catalyzes the reduction of uracil and thymine (PubMed:1512248). Also involved the degradation of the chemotherapeutic drug 5-fluorouracil (PubMed:1512248).
Cellular Location	Cytoplasm.
Tissue Location	Found in most tissues with greatest activity found in liver and peripheral blood mononuclear cells

Background

DPYD(Dihydropyrimidine Dehydrogenase), also called DPD, is an enzyme that in humans is encoded by the DPYD gene. 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. The structure of the DPYD gene contains 23 exons spanning about 950 kb. Using somatic cell hybrid strategies, the DPYD gene is mapped to the centromeric region of chromosome 1 between 1p22 and 1q21. By fluorescence in situ hybridization, the DPYD gene is mapped to 1p22. The highest level of DPD was found in monocytes followed by that in lymphocytes, granulocytes, and platelets, whereas no significant activity of DPD could be detected in erythrocytes. The activity of DPD in peripheral blood mononuclear cells was intermediate between that observed in monocytes and lymphocytes. By cDNA microarray, Western blot analysis, and luciferase reporter assay, the transcription factor LSF was identified as a positive regulator of DPYD.

Images



Anti-DPYD antibody, ABO11070, Western blottingWB: MM231 Cell Lysate