

Anti-DPYD Antibody
Catalog # ABO11070**Specification**

Anti-DPYD Antibody - 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.

Anti-DPYD Antibody - Additional Information

Gene ID 1806

Other Names

Dihydropyrimidine dehydrogenase [NADP(+)], DHPDHase, DPD, 1.3.1.2, Dihydrothymine dehydrogenase, Dihydrouracil dehydrogenase, DPYD

Calculated MW

111401 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm.

Tissue Specificity

Found in most tissues with greatest activity found in liver and peripheral blood mononuclear cells.

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 reconstitution, 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.

Anti-DPYD Antibody - Protein Information

Name DPYD ([HGNC:3012](#))

Function

Involved in pyrimidine base degradation (PubMed: [1512248](http://www.uniprot.org/citations/1512248)). Catalyzes the reduction of uracil and thymine (PubMed: [1512248](http://www.uniprot.org/citations/1512248)). Also involved in the degradation of the chemotherapeutic drug 5-fluorouracil (PubMed: [1512248](http://www.uniprot.org/citations/1512248)).

Cellular Location

Cytoplasm.

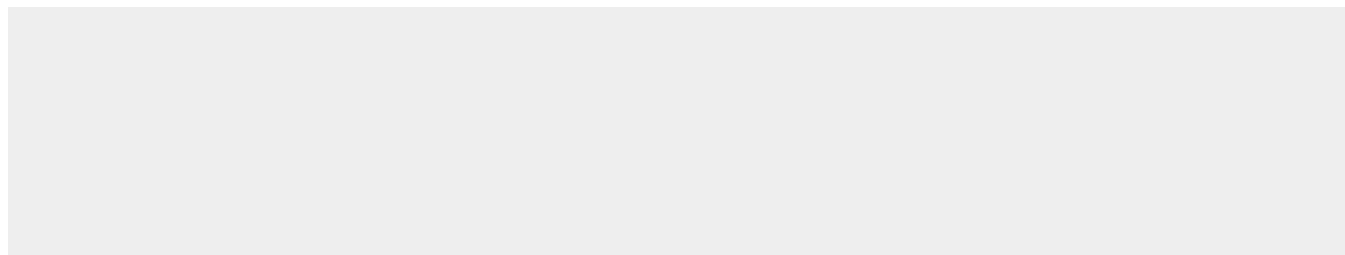
Tissue Location

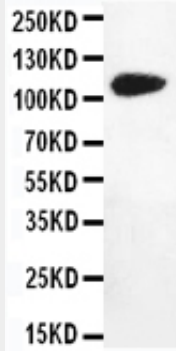
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Anti-DPYD Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-DPYD Antibody - Images



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

Anti-DPYD Antibody - 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.