

DPYD Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant DPYD. Catalog # AT1815a

Product Information

Application	WB, IF, E
Primary Accession	<u>Q12882</u>
Other Accession	<u>NM_000110</u>
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	7D4
Calculated MW	111401

Additional Information

Gene ID	1806
Other Names	Dihydropyrimidine dehydrogenase [NADP(+)], DHPDHase, DPD, Dihydrothymine dehydrogenase, Dihydrouracil dehydrogenase, DPYD
Target/Specificity	DPYD (NP_000101, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	DPYD Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

References

Variants in the dihydropyrimidine dehydrogenase, methylenetetrahydrofolate reductase and thymidylate

synthase genes predict early toxicity of 5-fluorouracil in colorectal cancer patients. Kristensen MH, et al. J Int Med Res, 2010 May-Jun. PMID 20819423.Genetic polymorphisms associated with 5-Fluorouracil-induced neurotoxicity. Kim SR, et al. Chemotherapy, 2010. PMID 20714149.Value of gene polymorphisms as markers of 5-FU therapy response in stage III colon carcinoma: a pilot study. Fari?a-Sarasqueta A, et al. Cancer Chemother Pharmacol, 2010 Jul 28. PMID 20665215.Absence of large intragenic rearrangements in the DPYD gene in a large cohort of colorectal cancer patients treated with 5-FU-based chemotherapy. Par? L, et al. Br J Clin Pharmacol, 2010 Aug. PMID 20653680.[Correlation between clinicopathological factors and enzymatic activity of orotate phosphoribosyl transferase (OPRT), dihydropyrimidine dehydrogenase (DPD) in esophageal cancer] Takemura M, et al. Gan To Kagaku Ryoho, 2010 Jul. PMID 20647710.





Immunofluorescence of monoclonal antibody to DPYD on HeLa cell. [antibody concentration 10 ug/ml]





Detection limit for recombinant GST tagged DPYD is approximately 0.1ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.