

Duffy Polyclonal Antibody

Catalog No: YT1420

Reactivity: Human; Rat; Mouse;

Applications: IF;ELISA

Target: Duffy

Fields: >>Malaria

Gene Name: DARC

Protein Name: Duffy antigen/chemokine receptor

Q16570

Q9QUI6

Human Gene ld: 2532

Human Swiss Prot

Idiliali Swiss Fiot

No:

Mouse Swiss Prot

No:

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

DARC. AA range:1-50

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

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

Source: Polyclonal, Rabbit, IgG

Dilution: IF 1:200 - 1:1000. ELISA: 1:40000. 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)

1/3



Molecularweight:

36kD

Background:

The protein encoded by this gene is a glycosylated membrane protein and a non-specific receptor for several chemokines. The encoded protein is the receptor for the human malarial parasites Plasmodium vivax and Plasmodium knowlesi. Polymorphisms in this gene are the basis of the Duffy blood group system. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

Function:

disease:Individuals that do not produce the Duffy antigen (FY(A-B-)) are more resistant to vivax malaria. This allele is found predominantly in population of African origin.,function:Non-specific receptor for many chemokines such as IL-8, GRO, RANTES, MCP-1 and TARC. It is also the receptor for the human malaria parasites Plasmodium vivax and Plasmodium knowlesi.,online information:Blood group antigen gene mutation database,online information:Duffy antigen entry,polymorphism:DARC is responsible for the Duffy blood group system. The molecular basis of the Fy(A)=Fy1/Fy(B)=Fy2 blood group antigens is a single variation in position 42; Gly-42 corresponds to Fy(A) and Asp-42 to Fy(B).,polymorphism:Genetic variation in DARC is associated with white blood cell count quantitative trait locus type 1 (WBCQ1) [MIM:611862]. Peripheral white blood cell count (WBC) is a common clinical measurement, us

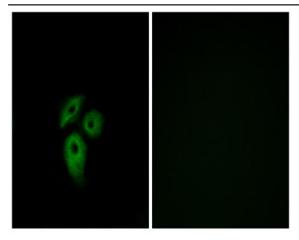
Subcellular Location:

Early endosome. Recycling endosome. Membrane; Multi-pass membrane protein. Predominantly localizes to endocytic vesicles, and upon stimulation by the ligand is internalized via caveolae. Once internalized, the ligand dissociates from the receptor, and is targeted to degradation while the receptor is recycled back to the cell membrane.

Expression:

Found in adult kidney, adult spleen, bone marrow and fetal liver. In particular, it is expressed along postcapillary venules throughout the body, except in the adult liver. Erythroid cells and postcapillary venule endothelium are the principle tissues expressing duffy. Fy(-A-B) individuals do not express duffy in the bone marrow, however they do, in postcapillary venule endothelium.

Products Images



Immunofluorescence analysis of A549 cells, using CD234 Antibody. The picture on the right is blocked with the synthesized peptide.