



# Duffy Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-13200
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	IF;ELISA
<b>Gene Name</b>	DARC
<b>Protein Name</b>	Duffy antigen/chemokine receptor
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human DARC. AA range:1-50
<b>Specificity</b>	Duffy Polyclonal Antibody detects endogenous levels of Duffy protein.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	DARC; FY; GPD; Duffy antigen/chemokine receptor; Fy glycoprotein; GpFy; Glycoprotein D; Plasmodium vivax receptor; CD antigen CD234
<b>Observed Band</b>	
<b>Cell Pathway</b>	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.
<b>Tissue Specificity</b>	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.
<b>Function</b>	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

#### 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],

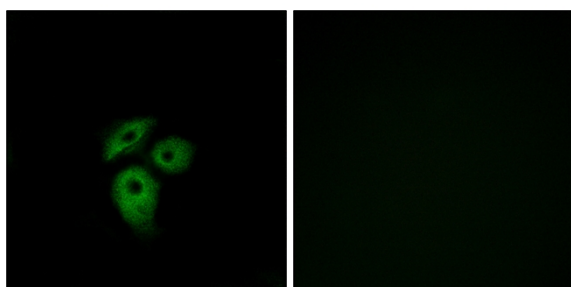
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



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