

## DARC Antibody

*DARC (CT): Duffy antigen, Fy glycoprotein, GpFy, Cell adhesion molecule 3, CADM3*

**CATALOG No.:4069**

### BACKGROUND:

DARC, also known as the Duffy antigen/chemokine receptor, is a seven-transmembrane protein homologous to the classical chemokine G-protein coupled receptors (GPCRs) with the exception of the motif required for G protein coupling (1). DARC can bind with high affinity several chemokines without transducing any signal, suggesting it may modulate the signals normally induced by these chemokines (2). Recently, DARC was found to interact with KAI1, a four transmembrane protein recently identified as a tumor metastasis suppressor protein (3). It is thought that tumor cells dislodged from the primary tumor and expressing KAI1 interact with DARC proteins expressed on vascular cells, transmitting a senescent signal to the tumor cells, while tumor cells that have lost KAI1 expression can proliferate and potentially give rise to metastases. At least three isoforms of DARC are known to exist.

### SOURCE:

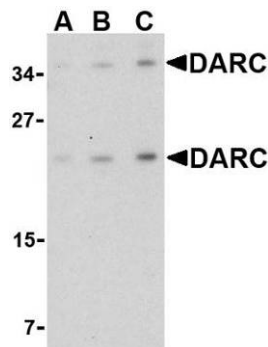
Rabbit polyclonal DARC antibody was raised against a 16 amino acid peptide from near the carboxy terminus of human DARC (GenBank accession no. Q16570).

### APPLICATION:

DARC antibody can be used for detection of DARC by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Mouse brain tissue lysate can be used as positive control. DARC antibody is human, mouse and rat reactive. **For research use only.**

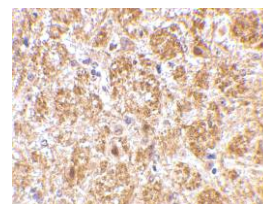
### STORAGE:

DARC antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of DARC in mouse brain tissue lysate with DARC antibody at (A) 0.5, (B) 1 and (C) 2 µg/ml.

Immunohistochemistry of DARC in mouse brain tissue with DARC antibody at 2.5 µg/ml.



### RELATED PRODUCTS:

Blocking Peptide, Catalog No. **4069P**.  
Mouse Brain Tissue Lysate, Catalog No. **1403**.  
KAI1 Antibody (CT), Catalog No. **4073**.  
DARC Antibody (NT), Catalog No. **4071**.

### REFERENCES:

1. Chaudhuri A, Polyakova J, Zbrzezna V, et al. Cloning of glycoprotein D cDNA, which encodes the major subunit of the Duffy blood group system and the receptor for the Plasmodium vivax malaria parasite. *Proc. Natl. Acad. Sci. USA* 1993; 90:10793-7.
2. Gardner L, Patterson AM, Ashton BA, et al. The human Duffy antigen binds selected inflammatory but not homeostatic chemokines. *Biochem. Biophys. Res. Commun.* 2004; 321:306-12.
3. Gil ML, Vita N, Lebel-Binay S, et al. A member of the tetra spans transmembrane protein superfamily is recognized by a monoclonal antibody raised against an HLA class I-deficient, lymphokine-activated killer-susceptible, B lymphocyte line. Cloning and functional studies. *J. Immunol.* 1992; 2826-33. (08-01D)