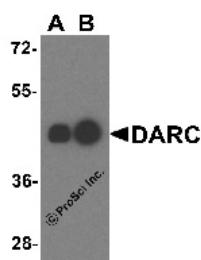


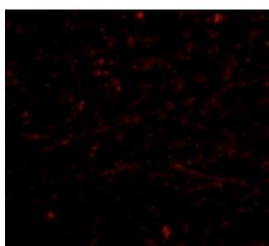


DARC Antibody

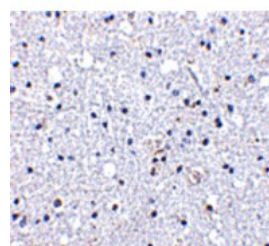
CATALOG NUMBER: 4071



Western blot analysis of DARC in human liver tissue lysate with DARC antibody at (A) 0.25 and (B) 0.5 ug/mL.



Immunofluorescence of DARC in Human Brain cells with DARC antibody at 20 ug/mL.



Immunohistochemistry of DARC in human brain tissue with DARC antibody at 5 ug/mL.

Specifications

SPECIES REACTIVITY:	Human
TESTED APPLICATIONS:	ELISA, IF, IHC-P, WB
APPLICATIONS:	DARC antibody can be used for detection of DARC by Western blot at 0.5 - 2 ug/mL. Antibody can also be used for immunohistochemistry starting at 5 ug/mL. For immunofluorescence start at 20 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1304 - Human Liver Tissue Lysate 2) Cat. No. 1303 - Human Brain Tissue Lysate
IMMUNOGEN:	DARC antibody was raised against a 18 amino acid synthetic peptide from near the amino terminus of human DARC. The immunogen is located within the first 50 amino acids of DARC.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	DARC Antibody is affinity chromatography purified via peptide column.
PHYSICAL STATE:	Liquid
BUFFER:	DARC Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	DARC antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	DARC Antibody: FY, Dfy, GPD, GpFy, ACKR1, CCBP1, CD234, WBCQ1, FY, Atypical chemokine receptor 1
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ACCESSION NO.:	Q16570
PROTEIN GI NO.:	67476970
OFFICIAL SYMBOL:	DARC
GENE ID:	2532

Background

BACKGROUND: DARC Antibody: 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. DARC can bind with high affinity several chemokines without transducing any signal, suggesting it may modulate the signals normally induced by these chemokines. Recently, DARC was found to interact with KAI1, a four transmembrane protein recently identified as a tumor metastasis suppressor protein. 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.

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.

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December 12, 2016