

Datasheet for 600-401-AS7**DARC Antibody****Overview**

Description:	Anti-DARC (RABBIT) Antibody - 600-401-AS7
Item No.:	600-401-AS7
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

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. 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.
Synonyms:	DARC Antibody, Dfy, GPD, GpFy, ACKR1, CCBP1, CD234, WBCQ1, FY, Atypical chemokine receptor 1, Duffy antigen/chemokine receptor, Fy glycoprotein, Plasmodium vivax receptor, Glycoprotein D
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ACKR1
Reactivity:	Human

Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-DARC antibody was prepared from whole rabbit serum produced by repeated immunizations with a 18 amino acid synthetic peptide from near the N-terminus of human DARC.
Purity/Specificity:	Anti-DARC Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with DARC from other sources has not been determined.
Relevant Links:	• UniProtKB - Q16570 • GeneID - 2532 • NCBI - NP_001116423.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-DARC Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 36 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:5000 - 1:20,000
IF:	20 µg/mL
IHC:	5 µg/mL
WB:	0.5-2 µg/mL

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

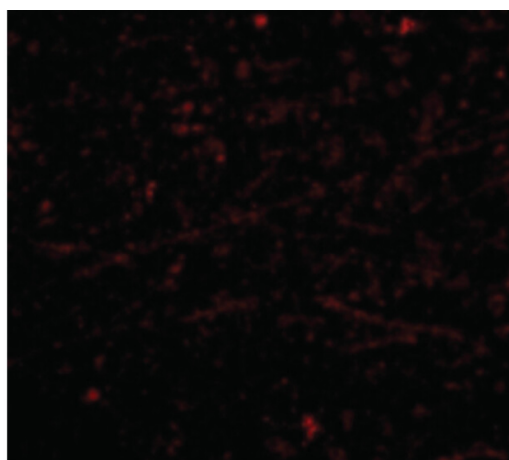
Shipping & Handling

Shipping Condition:	Dry Ice
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Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

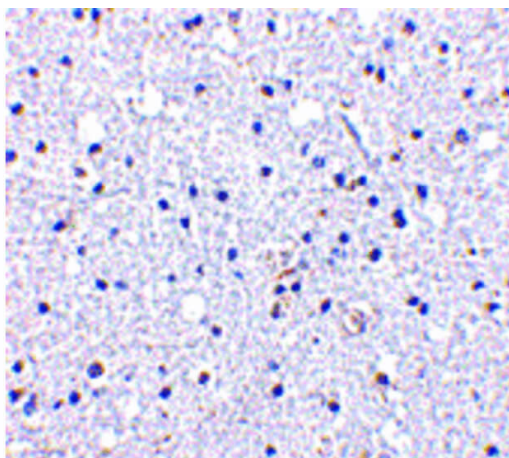
Expiration: Expiration date is one (1) year from date of receipt.

Images



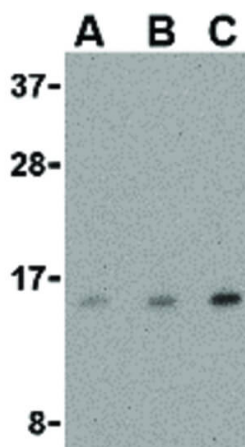
Immunofluorescence Microscopy

Immunofluorescence Microscopy of DARC antibody. Tissue: Human brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: DARC antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: DARC is nuclear and occasionally cytoplasmic. Staining: DARC as red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of DARC antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: DARC antibody at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: DARC is nuclear and occasionally cytoplasmic. Staining: DARC as precipitated red signal.

**Western Blot**

Western Blot of DARC antibody. Lane A: PC-3 cell lysate at 0.5 $\mu\text{g/mL}$. Lane B: PC-3 cell lysate at 1 $\mu\text{g/mL}$.

Lane C: PC-3 cell lysate at 2 $\mu\text{g/mL}$. Load: 35 μg per lane.

Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 35.5 kDa, ~16 kDa for DARC.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.