Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 200-401-AX5

DR4 Antibody

Overview

Description:	Anti-DR4 (RABBIT) Antibody - 200-401-AX5
Item No.:	200-401-AX5
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Apoptosis, or programmed cell death, occurs during normal cellular differentiation and development of multicellular organisms. Apoptosis is induced by certain cytokines including TNF and Fas ligand in the TNF family through their death domain containing receptors, TNFR1 and Fas. A novel death domain containing receptor was recently identified and designated DR4 (for death receptor 4). The ligand for this novel death receptor has been identified and termed TRAIL, which is a new member in the TNF family. DR4 is also called TRAIL receptor-1 (TRAIL-R1). DR4 is expressed in most of human tissues including spleen, peripheral blood leukocytes, small intestine and thymus. Like TNFR1, Fas and DR3, DR4 mediates apoptosis and NF-kB activation in many tissues and cells.
Synonyms:	DR4 Antibody, DR4, APO2, CD261, TRAILR1, TRAILR-1, DR4, Tumor necrosis factor receptor superfamily member 10A, Death receptor 4, TRAIL receptor 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	TNFRSF10A
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-DR4 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 20 amino acid peptide near the N-terminus of human DR4.
Purity/Specificity:	Anti-DR4 Antibody is affinity chromatography purified via peptide column. DR4 antibody has no cross reaction to DR5.
Relevant Links:	• UniProtKB - O00220 • GeneID - 8797 • NCBI - AAC51226

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-DR4 Antibody has been tested for use in ELISA, immunocytochemistry, immunofluorescence, and Western Blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 50 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:	1:5,000
IF:	5 µg/mL
WB:	1:5,000

Formulation

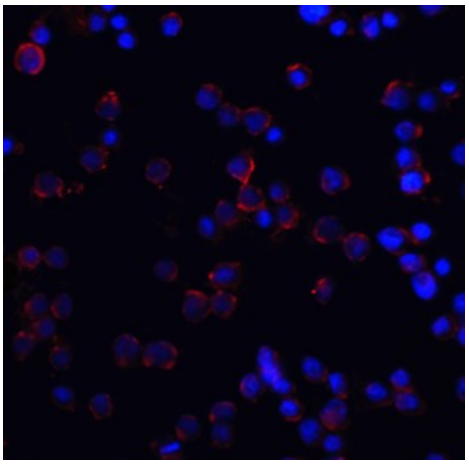
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

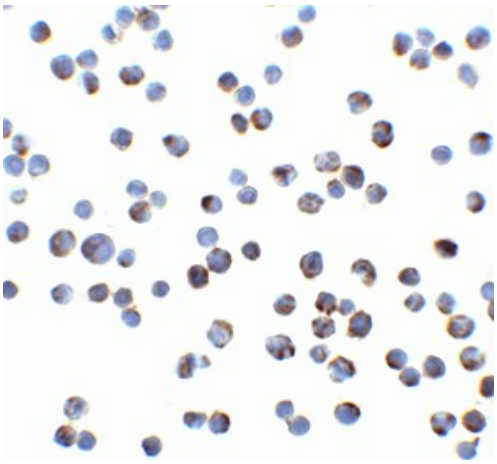
Shipping Condition:	Dry Ice

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.

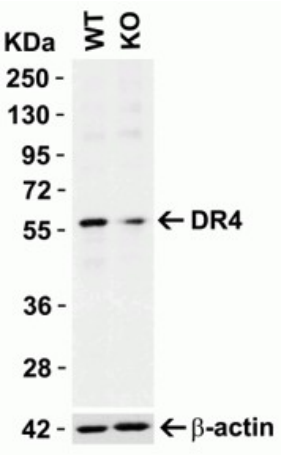
Images



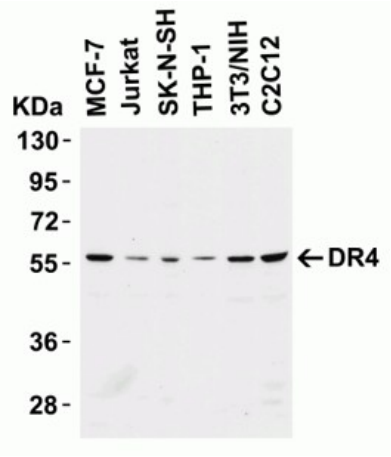
Immunofluorescence Microscopy
Immunofluorescence Validation of DR4 in HeLa Cells. Immunofluorescent analysis of 4% paraformaldehyde-fixed HeLa cells labeling DR4 at 5 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (red) and DAPI staining (blue). Image showing membrane staining on HeLa cells.



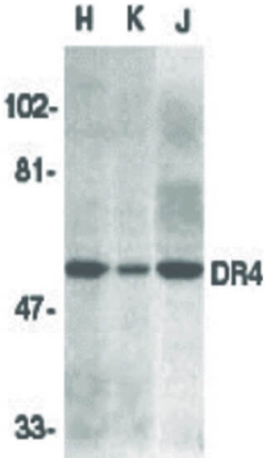
Immunocytochemistry
Immunocytochemistry Validation of DR4 in HeLa Cells. Immunocytochemical analysis of HeLa cells using anti-DR4 antibody at 2 µg/ml. Cells was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



Western Blot
KO Validation in HeLa Cells.
Loading: 10 µg of HeLa WT cell lysates or DR4 KO cell lysates. Antibodies: DR4 (1 µg/mL) and beta-actin (1 µg/mL), 1 h incubation at RT in 5% NFDM/TBST. Secondary: Goat Anti-Rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot
Western Blot Validation in Cell Lines. Loading: 15 µg of cell lysates per lane. Antibodies: DR4 (4µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



Western Blot
Western Blot of Rabbit anti-DR4 antibody. Lane 1: HeLa whole cell lysate (H). Lane2: K562 whole cell lysate (K). Lane 3: Jurat whole cell lysate (J). Load: 35 µg per lane. Primary antibody: anti-DR4 antibody at 1:500 for overnight at 4°C. 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: 50 kDa, 50 kDa for DR4. Other band(s): None.

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.