

Datasheet for 600-401-DW2**RAP80 Antibody****Overview**

Description:	Anti-RAP80 (RABBIT) Antibody - 600-401-DW2
Item No.:	600-401-DW2
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	RAP80 was initially identified as zinc-finger containing nuclear protein that is highly expressed in testis and interacts with the retinoid-related testis-associated receptor (RTR). Later experiments revealed that RAP80 is recruited by the Coiled-coil domain 98 (CCDC98) protein to the breast cancer-1 protein BRCA1, allowing the formation of BRCA1 foci in response to DNA damage caused by ionizing radiation. Both RAP80 and CCDC98 are required for DNA damage resistance, G2-M checkpoint control, and DNA repair. Cells depleted of either RAP80 or CCDC98 exhibited increased sensitivity to ionizing radiation, although not as much as in BRCA1-depleted cells, suggesting that RAP80 and CCDC98 control only part of the DNA damage response role of BRCA1. At least four isoforms of RAP80 are known to exist.
Synonyms:	RAP80 Antibody, RAP80, X2HRIP110, RAP80, RXRIP110, BRCA1-A complex subunit RAP80, Receptor-associated protein 80
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	UIMC1
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-RAP80 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid synthetic peptide from near the C-terminus of human RAP80.
Purity/Specificity:	Anti-RAP80 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with RAP80 from other sources has not been determined.
Relevant Links:	• UniProtKB - Q96RL1 • GeneID - 51720 • NCBI - EAW85043

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-RAP80 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 80 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:	1:20,000
IF:	20 µg/mL
IHC:	2.5 µg/mL
WB:	2 µg/mL

Formulation

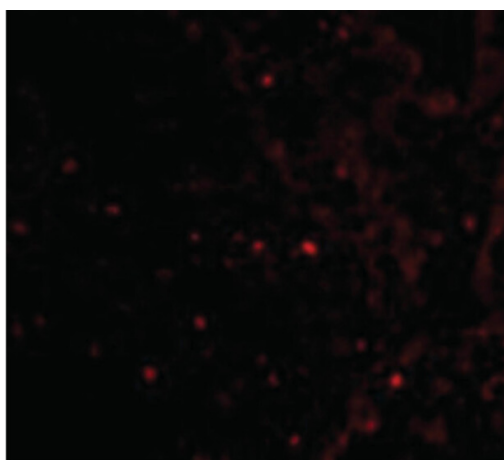
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

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.

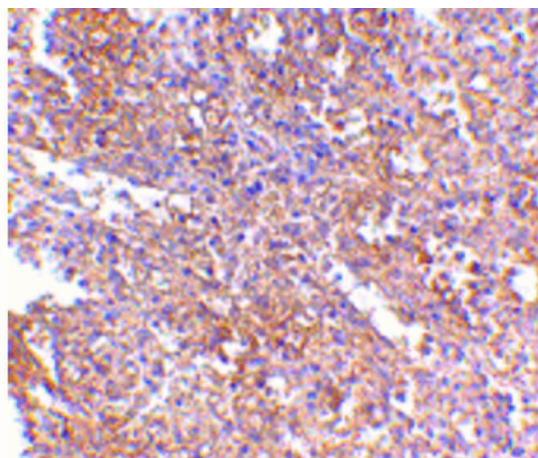
Images



Immunofluorescence Microscopy

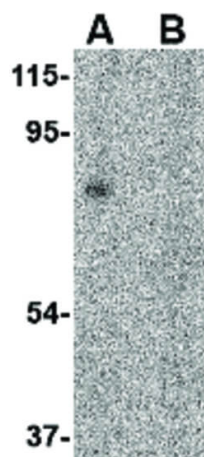
Immunofluorescence Microscopy of RAP80 antibody.

Tissue: Spleen cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: RAP80 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. Staining: RAP80 as red fluorescent signal.



Immunohistochemistry

Immunohistochemistry of RAP80 antibody. Tissue: Human spleen tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: RAP80 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: RAP80 is nuclear and occasionally cytoplasmic. Staining: RAP80 as precipitated red signal with hematoxylin purple nuclear counterstain.

**Western Blot**

Western Blot of RAP80 antibody. Lane A: 293 cell lysate in the absence of blocking peptide at 2 µg/mL. Lane B: 293 cell lysate in the presence of blocking peptide at 2 µg/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: 79.7 kDa, ~80 kDa for RAP80.

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.