

Datasheet for 600-401-896**Mre11 Antibody****Overview**

Description:	Anti-Mre11 (RABBIT) Antibody - 600-401-896
Item No.:	600-401-896
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Mouse
Host Species:	Rabbit

Product Details

Background:	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI). Mre11 is a component of the MRN complex (Mre11/Rad50/Nbs1), which plays a central role in double-strand break (DSB) repair, DNA recombination, maintenance of telomere integrity and meiosis. The complex possesses single-strand endonuclease activity and double-strand-specific 3'-5' exonuclease activity, which are provided by MRE11A. RAD50 may be required to bind DNA ends and hold them close. This could facilitate searches for short or long regions of sequence homology in the recombining DNA templates, and may also stimulate the activity of DNA ligases and/or restrict the nuclease activity of MRE11A to prevent nucleolytic degradation past a given point. The complex may also be required for DNA damage signaling via activation of the ATM kinase. In telomeres, the MRN complex may modulate t-loop formulation. Anti-Mre11 Antibody is useful for researcher interested in DNA Damage and Repair and Nuclear Signaling Research.
Synonyms:	rabbit anti-Mre11 antibody, Double-strand break repair protein MRE11a, DNA recombination and repair protein, Meiotic recombination 11 homolog A, Mre11a
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Mre11a
Reactivity:	Mouse

Immunogen Type:	Recombinant Protein
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a recombinant protein corresponding to amino acids 68-706 of mouse Mre11 protein.
Purity/Specificity:	This affinity purified antibody is directed against mouse Mre11 protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with Mre11 protein from rat (94% homology). Based on protein sequence homology also expect partial reactivity against Mre11 homologues from macaque (88%), human (84%) and dog (82%). This sequence shows less than 75% homology to homologues from bovine, Xenopus, chicken, chimpanzee and zebrafish sources. Reactivity against homologues from other sources is not known.
Relevant Links:	• UniProtKB - Q61216 • NCBI - 18202590 • GenelD - 4361

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 80 kDa in size corresponding to Mre11 by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:50,000
WB:	1:500 - 1:2,000

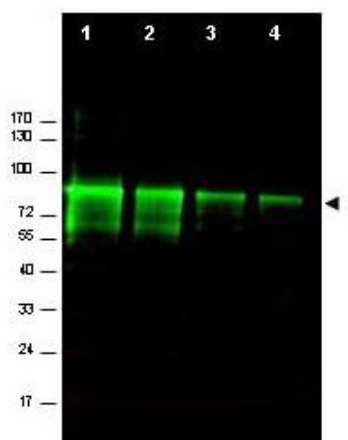
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.05 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (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



Western Blot

Western blot using Rockland's Affinity Purified anti-Mre11 antibody shows detection of a band ~80 kDa corresponding to mouse Mre11 (arrowhead). Lanes 1-4 contain 0.5 ug, 0.3 ug, 0.1 ug and 0.05 ug of purified mouse Mre11 protein, respectively. After 4-20% SDS-PAGE and transfer onto nitrocellulose, the membrane was blocked and then probed with the primary antibody diluted to 1:1,000 overnight at 4°C. The membrane was then washed and reacted with a 1:10,000 dilution of IRDye800 conjugated Gt-a-Rabbit IgG [H&L] MX (611-132-122) for 45 min at room temperature. IRDye800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.

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.