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Datasheet for 600-401-682

BRRN1 Antibody

Overview

Description:	Anti-BRRN1 (RABBIT) Antibody - 600-401-682
Item No.:	600-401-682
Size:	100 µg
Applications:	ELISA, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	BRNN1, also called Barren, Condensin subunit 2, Barren homolog protein 1, Chromosome-associated protein H, hCAP-H, and XCAP-H homolog, is encoded by a gene that is a member of the barr gene family. Brnn1 is the regulatory subunit of the condensin complex, a complex required for conversion of interphase chromatin into mitotic-like condense chromosomes. The condensin complex probably introduces positive supercoils into relaxed DNA in the presence of type I topoisomerases and converts nicked DNA into positive knotted forms in the presence of type II topoisomerases. The condensin complex contains the SMC2L1 and SMC4L1 heterodimer, and three non SMC subunits that probably regulate the complex: BRRN1/CAPH, CNAP1/CAPD2 and CAPG. BRRN1 has both a nuclear and cytoplasmic localization. In interphase cells, the majority of the condensin complex is found in the cytoplasm, while a minority of the complex is associated with chromatin. A subpopulation of the complex however remains associated with chromosome foci in interphase cells. During mitosis, most of the condensin complex is associated with the chromatin. At the onset of prophase, the regulatory subunits of the complex are phosphorylated by CDC2 leading to condensin's association with chromosome arms and to chromosome condensation. Dissociation from chromosomes is observed in late telophase. BRRN1 is widely expressed at low level in most proliferating cells. CDC2 phosphorylates BRRN1. Its phosphorylation, as well as that of CNAP1 and CAPG subunits, activates the condensin complex and is required for chromosome condensation.
Synonyms:	rabbit anti-BRRN-1 Antibody, BRRN1, BRRN 1, Barren Drosophila Homolog of 1 antibody, Barren homolog protein 1 antibody, BRRN antibody, CAP H antibody, CAPH antibody, Chromosome associated protein H antibody, Condensin complex subunit 2 antibody, Condensin subunit 2 antibody
Host Species:	Rabbit
Clonality:	Polyclonal

Format:	IgG

Target Details

Gene Name:	NCAPH
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to an internal region near amino acids 435-460 of Human BRRN-1.
Purity/Specificity:	This is an affinity purified antibody produced by immunoaffinity chromatography using the immunizing peptide after immobilization to a solid phase. Reactivity occurs against human BRRN1 protein. However, BLAST analysis indicates 100% homology (18/18) for this protein from human, and chimpanzee. Partial cross reactivity is expected against mouse, dog, rat chicken, and from based on sequence homology of the amino terminal 13 amino acids of the immunogen sequence. The core 8 amino acids of the immunogen, A-G-P-D-H-W-R-F, show 100% identity with numerous proteins from a variety of organisms. If blots show multiple banding patterns in any particular lysate, it is suggested to confirm the specific reactivity against the BRRN1 protein using peptide competition. Reactivity with Brnn1 proteins from other sources is not known.
Relevant Links:	• UniProtKB - Q15003 • NCBI - NP_001268639.1 • GeneID - 23397

Application Details

Tested Applications:	ELISA, WB
Application Note:	This affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 83 kDa in size corresponding to human BRRN1 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:	1:8,000 - 1:35,000
WB:	1:500 - 1:2,000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	0.93 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.

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.