

Datasheet for ABIN2780766
anti-SMC1A antibody (C-Term)[Go to Product page](#)

4 Images

Overview

Quantity:	100 µL
Target:	SMC1A
Binding Specificity:	C-Term
Reactivity:	Human, Mouse, Rat, Cow, Dog, Rabbit, Guinea Pig, Horse, Zebrafish (Danio rerio)
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This SMC1A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the C terminal region of human SMC1A
Sequence:	VISLKEEFYT KAESLIGVYP EQGDCVISKV LTFDLTKYPD ANPNPNEQ
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 100%, Horse: 100%, Human: 100%, Mouse: 100%, Rabbit: 100%, Rat: 100%, Zebrafish: 77%
Characteristics:	This is a rabbit polyclonal antibody against SMC1A. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	SMC1A
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Target Details

Alternative Name: SMC1A ([SMC1A Products](#))

Background: The cohesin multiprotein complex is required for sister chromatid cohesion. This complex is composed partly of two structural maintenance of chromosomes (SMC) proteins, SMC3 and either SMC1L2 or the protein encoded by SMC1A gene. Most of the cohesin complexes dissociate from the chromosomes before mitosis, although those complexes at the kinetochore remain. Therefore, the SMC1A protein is thought to be an important part of functional kinetochores. In addition, this protein interacts with BRCA1 and is phosphorylated by ATM, indicating a potential role for this protein in DNA repair. Proper cohesion of sister chromatids is a prerequisite for the correct segregation of chromosomes during cell division.

The cohesin multiprotein complex is required for sister chromatid cohesion. This complex is composed partly of two structural maintenance of chromosomes (SMC) proteins, SMC3 and either SMC1L2 or the protein encoded by this gene. Most of the cohesin complexes dissociate from the chromosomes before mitosis, although those complexes at the kinetochore remain. Therefore, the encoded protein is thought to be an important part of functional kinetochores. In addition, this protein interacts with BRCA1 and is phosphorylated by ATM, indicating a potential role for this protein in DNA repair. This gene, which belongs to the SMC gene family, is located in an area of the X-chromosome that escapes X inactivation. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications.

Alias Symbols: CDLS2, DKFZp686L19178, DXS423E, KIAA0178, MGC138332, SB1.8, SMC1, SMC1L1, SMC1alpha, SMCB

Protein Interaction Partner: UBC, SUMO2, STAU1, RPA3, RPA2, RPA1, RNF2, EED, KIF13A, ARMCX3, CDK20, ANKRD28, HDAC11, HDAC8, SMC1A, RFC1, POLA1, MCM7, MCM6, METTL21B, WHSC1, NOTCH1, SF3B3, ACIN1, SMC2, RBM14, SMC3, RAD21, NSMCE2, FBXO6, CUL3, NEDD8, CDK2, CEBPA, CDK8, NIPBL, MDC1, POL

Protein Size: 1233

Molecular Weight: 143 kDa

Gene ID: 8243

NCBI Accession: [NM_006306](#), [NP_006297](#)

UniProt: [Q14683](#)

Pathways: [Stem Cell Maintenance](#)

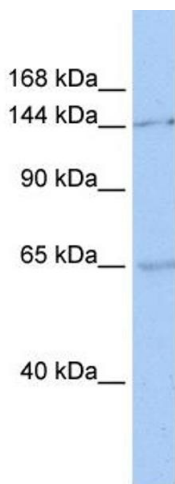
Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 1233 AA
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

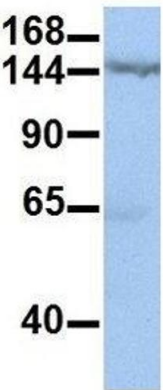
Images



Western Blotting

Image 1. WB Suggested Anti-SMC1A Antibody Titration: 0.2-1 ug/ml ELISA Titer: 1:1562500 Positive Control: 293T cell lysate SMC1A is supported by BioGPS gene expression data to be expressed in HEK293T

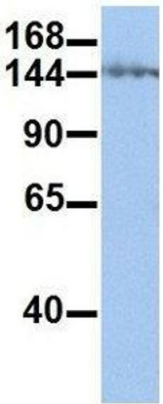
SMC1A



Western Blotting

Image 2. Host: Rabbit Target Name: SMC1A Sample Type: Human HepG2 Antibody Dilution: 1.0ug/ml SMC1A is supported by BioGPS gene expression data to be expressed in HepG2

SMC1A



Western Blotting

Image 3. Host: Rabbit Target Name: SMC1A Sample Type: Human Jurkat Antibody Dilution: 1.0ug/ml SMC1A is supported by BioGPS gene expression data to be expressed in Jurkat

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN2780766.