

Datasheet for ABIN7127813

Recombinant anti-SMC1A antibody**3** Images[Go to Product page](#)

Overview

Quantity:	100 µL
Target:	SMC1A
Reactivity:	Human
Host:	Rabbit
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Conjugate:	This SMC1A antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Immunogen:	A synthesized peptide derived from human SMC1
Clone:	8C11
Isotype:	IgG
Cross-Reactivity:	Human
Purification:	Affinity-chromatography

Target Details

Target:	SMC1A
Alternative Name:	SMC1A (SMC1A Products)
Background:	Background: Involved in chromosome cohesion during cell cycle and in DNA repair. Central

Target Details

component of cohesin complex. The cohesin complex is required for the cohesion of sister chromatids after DNA replication. The cohesin complex apparently forms a large proteinaceous ring within which sister chromatids can be trapped. At anaphase, the complex is cleaved and dissociates from chromatin, allowing sister chromatids to segregate. The cohesin complex may also play a role in spindle pole assembly during mitosis. Involved in DNA repair via its interaction with BRCA1 and its related phosphorylation by ATM, or via its phosphorylation by ATR. Works as a downstream effector both in the ATM/NBS1 branch and in the ATR/MSH2 branch of S-phase checkpoint.

Aliases: Structural maintenance of chromosomes protein 1A (SMC protein 1A) (SMC-1-alpha) (SMC-1A) (Sb1.8), SMC1A, DXS423E KIAA0178 SB1.8 SMC1 SMC1L1

UniProt: [Q14683](#)

Pathways: [Stem Cell Maintenance](#)

Application Details

Application Notes: Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200,

Restrictions: For Research Use only

Handling

Format: Liquid

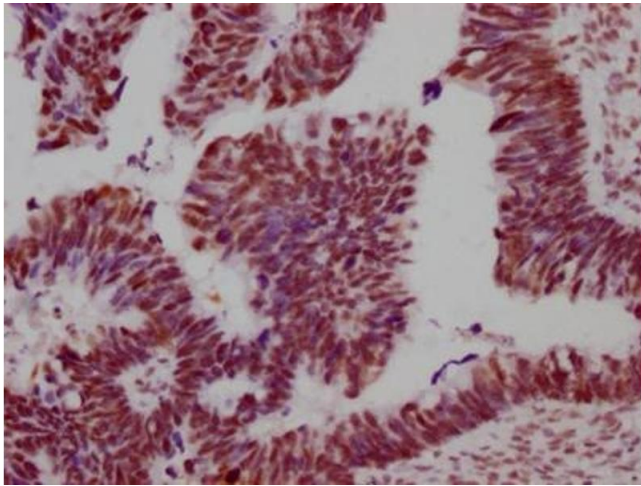
Buffer: Rabbit IgG in phosphate buffered saline, pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

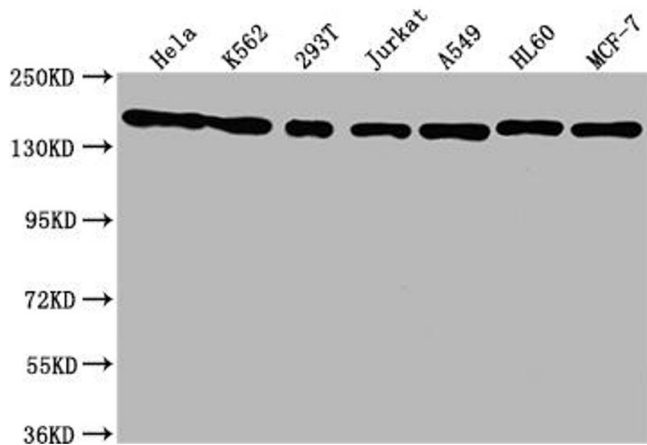
Storage: -20 °C,-80 °C

Storage Comment: Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.



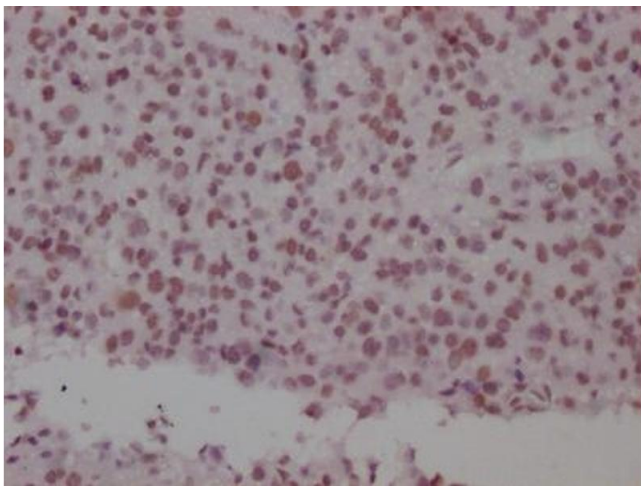
Immunohistochemistry

Image 1. IHC image of ABIN7127813 diluted at 1:100 and staining in paraffin-embedded human ovarian cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.



Western Blotting

Image 2. Western Blot Positive WB detected in: HeLa whole cell lysate, K562 whole cell lysate, 293T whole cell lysate, Jurkat whole cell lysate, A549 whole cell lysate, HL60 whole cell lysate, MCF-7 whole cell lysate. All lanes: SMC1A antibody at 1:1500. Secondary Goat polyclonal to rabbit IgG at 1/50000 dilution. Predicted band size: 144 kDa. Observed band size: 144 kDa.



Immunohistochemistry

Image 3. IHC image of ABIN7127813 diluted at 1:100 and staining in paraffin-embedded human glioma cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10 % normal goat serum 30 min at RT. Then primary antibody (1 % BSA) was incubated at 4 °C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05 % DAB.