

## Anti-SMC1A Rabbit Monoclonal Antibody

### Introduction

Structural maintenance of chromosomes 1 (SMC1) protein is a chromosomal protein member of the cohesin complex that enables sister chromatid cohesion and plays a role in DNA repair. ATM/NBS1-dependent phosphorylation of SMC1 occurs at Ser957 and Ser966 in response to ionizing radiation (IR) as part of the intra-S-phase DNA damage checkpoint. SMC1 phosphorylation is ATM-independent in cells subjected to other forms of DNA damage, including UV light and hydroxyurea treatment.

### Product parameters

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Alternative Names | Chromosome segregation protein SmcB; DXS423E; KIAA0178; MGC138332; Sb1.8; Segregation of mitotic chromosomes 1; SMC protein 1A; SMC-1-alpha; SMC-1A; SMC1 (structural maintenance of chromosomes 1 yeast) like 1; SMC1; SMC1 structural maintenance of chromosomes 1 like 1; SMC1A; SMC1A_HUMAN; SMC1alpha; SMC1L1; SMCB; Structural maintenance of chromosomes 1A; Structural maintenance of chromosomes protein 1A. |
| Gene ID           | 8243                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Gene Name         | SMC1A                                                                                                                                                                                                                                                                                                                                                                                                                 |
| SwissProt ID      | Q14683                                                                                                                                                                                                                                                                                                                                                                                                                |
| Host              | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                |
| Reactivity        | Human, Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                     |
| Molecular Weight  | Calculated MW: 143 kDa; Observed MW: 143 kDa                                                                                                                                                                                                                                                                                                                                                                          |
| Conjugation       | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                          |
| Ex                | -                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Em                | -                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Modification      | Unmodified                                                                                                                                                                                                                                                                                                                                                                                                            |
| Clonality         | IgG                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Isotype           | Monoclonal Antibody                                                                                                                                                                                                                                                                                                                                                                                                   |
| Clonality No.     | AP-8C6E2                                                                                                                                                                                                                                                                                                                                                                                                              |
| Form              | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                |
| Concentration     | See label                                                                                                                                                                                                                                                                                                                                                                                                             |
| Carrier           | Carrier Not Free                                                                                                                                                                                                                                                                                                                                                                                                      |
| Immunogen         | A synthetic peptide of human SMC1                                                                                                                                                                                                                                                                                                                                                                                     |
| Purification      | Affinity Purified                                                                                                                                                                                                                                                                                                                                                                                                     |
| Buffer System     | 50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA.                                                                                                                                                                                                                                                                                                                               |

|                    |                                  |
|--------------------|----------------------------------|
| Application        | WB, IP                           |
| Dilution Ratio     | WB: 1/500-1/1000 IP: 1/20        |
| Research Field     | Cell Biology                     |
| Product Categories | Primary antibody                 |
| Shipping           | Blue ice                         |
| Storage            | -20°C                            |
| Expiration Date    | 12 months                        |
| Note               | Please avoid freeze-thaw cycles. |

## Protocol

Configure the product according to the application range and recommended dilution ratio.

**\*Note:** The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).

## Note

1. This product is for scientific research use only.





**APExBIO Technology**

**[www.apexbt.com](http://www.apexbt.com)**

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: [info@apexbt.com](mailto:info@apexbt.com)

