

Product Datasheet

Phospho-SMC1 (S957) Antibody

Catalog No: CY5666

Reactivity: Human

Isotype: Rabbit IgG

Applications: WB IHC ICC



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Information

UniProt ID: Q14683

All Names: Chromosome segregation protein SmcB; DXS423E; KIAA0178; SB1.8/DXS423E protein; SM1A; SMC1A; SMC1L1; SMC1alpha protein; Sb1.8; Structural maintenance of chromosome 1-like 1 protein;

Form: Liquid

Storage instructions: Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Storage buffer: pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Purity: Affinity-chromatography

Immunogen: A synthesized peptide

Molecular Wt.: 160 kDa

Application

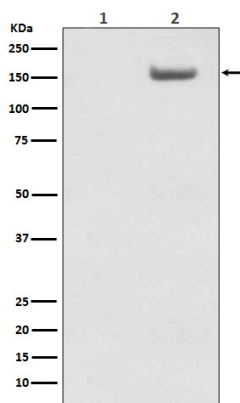
WB: 1:500~1:2000

IHC: 1:50~1:200

ICC: 1:50~1:200

Background

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 (1,2). 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 (3). SMC1 phosphorylation is ATM-independent in cells subjected to other forms of DNA damage, including UV light and hydroxyurea treatment (4). While phosphorylation of SMC1 is required for activation of the IR-induced intra-S-phase checkpoint, the precise mechanism is not well understood and may involve a conformational change that affects SMC1-SMC3 interaction (3).



Western blot analysis of Phospho-SMC1 (S957) expression in (1) HeLa cell lysate; (2) HeLa cells lysate treated with AP.

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