

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse and rat SMC1 in Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 317705
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human SMC1 Met837-Gln1233 Accession # Q14683
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Structural Maintenance of Chromosome 1 (SMC1) is an ATPase which, with SMC3, forms a heterodimeric complex. These dimers form a V-shaped molecule with two long coiled-coil arms, each having an ATP-binding domain at its distal end. The SMC1/SMC3 heterodimer plays an important role in sister chromatid cohesion during metaphase, associates with the nuclear matrix and centrosome during interphase and localizes to kinetochores, spindles and spindle poles during mitosis. SMC1 is also a component of the DNA damage response and participates in the cellular response to DNA damage through its phosphorylation on Ser 957 and 966.

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