

CoraLite®594-conjugated SMC1A Monoclonal antibody

Catalog Number: **CL594-66987**

Basic Information

Catalog Number:

CL594-66987

Size:

1000 µg/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG17257

GenBank Accession Number:

BC112127

GeneID (NCBI):

8243

UNIPROT ID:

Q14683

Full Name:structural maintenance of
chromosomes 1A**Calculated MW:**

1233 aa, 143 kDa

Observed MW:

150 kDa

Purification Method:

Protein A purification

CloneNo.:

1A5D2

Recommended Dilutions:

IF-P 1:50-1:500

**Excitation/Emission maxima
wavelengths:**

588 nm / 604 nm

Applications

Tested Applications:

IF-P

Species Specificity:

Human, mouse, rat

Positive Controls:

IF-P: human colon cancer tissue,

Background Information

Structural maintenance of chromosomes protein 1A (SMC1A) is involved in chromosome cohesion during cell cycle and in DNA repair. It is a central component of cohesin complex which 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.

Storage

Storage:

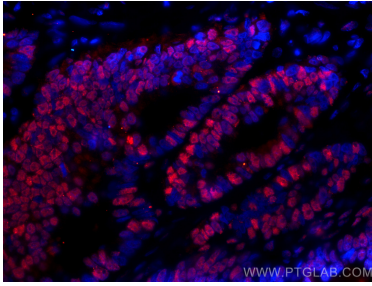
Store at -20°C. Avoid exposure to light.

Storage Buffer:

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed human colon cancer tissue using CoraLite®594 SMC1A antibody (CL594-66987, Clone: 1A5D2) at dilution of 1:200.