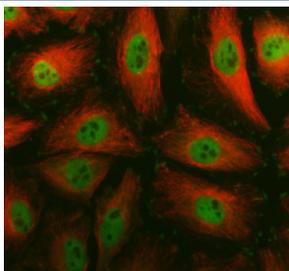


SMC4 Antibody / Structural maintenance of chromosomes protein 4 (RQ8909)

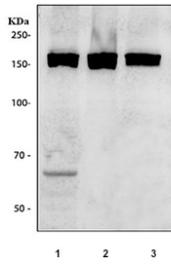
Catalog No.	Formulation	Size
RQ8909	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

[Bulk quote request](#)

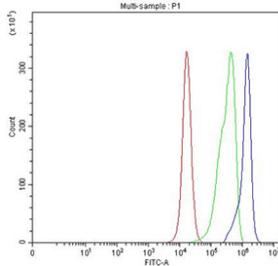
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q9NTJ3
Localization	Nuclear, cytoplasmic
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This SMC4 antibody is available for research use only.



Immunofluorescent staining of FFPE human HeLa cells with SMC4 antibody (green) and Alpha Tubulin mAb (red). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) U-251, 2) K562 and 3) PC-3 cell lysate with SMC4 antibody. Predicted molecular weight ~147 kDa.



Flow cytometry testing of fixed and permeabilized human PC-3 cells with SMC4 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= SMC4 antibody.

Description

Structural maintenance of chromosomes protein 4 (SMC4) is a core component of the condensin complex, which is essential for chromosome organization and segregation during mitosis and meiosis. SMC4 belongs to the ATP-binding cassette family of proteins and functions as a molecular motor that drives chromatin condensation and stability.

SMC4 is required for proper chromosome dynamics, DNA repair, and maintenance of genomic integrity. Dysregulation of SMC4 has been associated with chromosomal instability, cancer progression, and defective cell cycle control, highlighting its importance in both normal cellular division and disease research.

Using a high-quality SMC4 antibody enables sensitive detection in applications such as western blot, immunohistochemistry, and immunoprecipitation. An SMC4 antibody from NSJ Bioreagents ensures reproducibility and reliability for studies involving chromosome structure, genome maintenance, and cancer biology. Selecting the right SMC4 antibody is essential for accurate and consistent results.

Application Notes

Optimal dilution of the SMC4 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids K911-C1288) was used as the immunogen for the SMC4 antibody.

Storage

After reconstitution, the SMC4 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

