

**CENP-A Antibody****CENP-A Antibody, Clone 5A7-2E11****Catalog # ASM10149****Specification****CENP-A Antibody - Product Information**

Application	WB, ICC
Primary Accession	<a href="#">P49450</a>
Other Accession	<a href="#">NP_001035891.1</a>
Host	Mouse
Isotype	IgG1
Reactivity	Human
Clonality	Monoclonal

**Description**

Mouse Anti-Human CENP-A Monoclonal IgG1

**Target/Specificity**

Detects ~18kDa. Recognizes Human CENP-A.

**Other Names**

CENP A Antibody, cenpa Antibody, Centromere auto antigen A Antibody, Histone H3 like centromeric protein A Antibody

**Immunogen**

Synthetic peptide corresponding to a portion of human CENP-A

**Purification**

Protein G Purified

**Storage****-20°C****Storage Buffer**

PBS, 50% glycerol, 0.09% sodium azide

**Shipping Temperature****Blue Ice or 4°C****Certificate of Analysis**

1 µg/ml of SMC-202 was sufficient for detection of CENPA in 20 µg of U2OS cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**

Nucleus | Chromosome | Centromere | Kinetochore

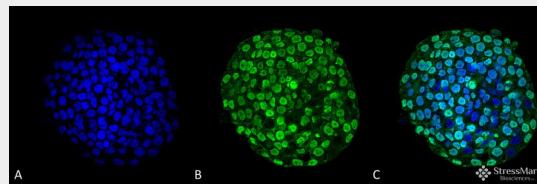
**CENP-A Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

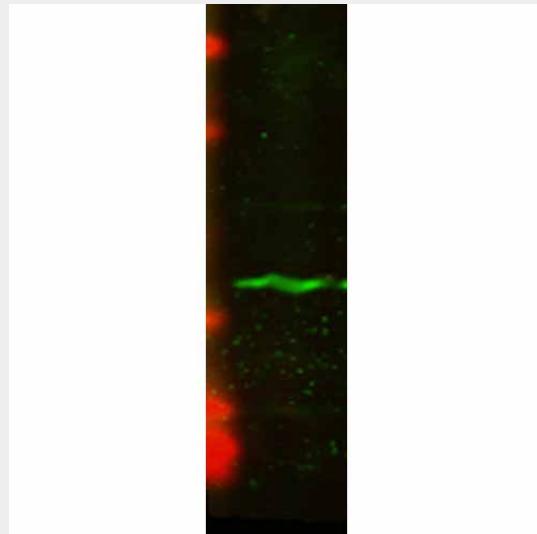
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CENP-A Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-CENP-A Monoclonal Antibody, Clone 5A7-2E11 (ASM10149). Tissue: Colon cancer cell line (HT-29). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-CENP-A Monoclonal Antibody (ASM10149) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: DAPI (blue) nuclear stain at 1:5000 for 5 min RT. Localization: Nucleus. Magnification: 60X.



Western Blot analysis of Human U2OS cell lysate showing detection of CENP-A protein using Mouse Anti-CENP-A Monoclonal Antibody, Clone 5A7-2E11 (ASM10149). Primary Antibody: Mouse Anti-CENP-A Monoclonal Antibody (ASM10149) at 1:1000.

### CENP-A Antibody - Background

A replicated chromosome includes two kinetochores that control chromosome segregation during mitosis. The Centromere Protein-A, CENP-A, is a Histone H3-like protein that contains a C-terminal H3-like domain, which is required for centromere localization of CENP-A, and an antigenic N-terminal domain. CENP-A, originally isolated from HeLa cells, is essential for kinetochore targeting of CENP-C. In the presence of DNA CENP-A forms an octa-meric complex with histones H4, H2A, H2B. CENP-A specifically localizes to active centromeres and is a component of specialized centromeric nucleosomes, on which kinetochores are assembled. CENP-A is essential for nucleosomal packaging of centromeric DNA at interphase and functions as a centromere formation marker on the chromosome.

### CENP-A Antibody - References

1. Rieder C.L., et al. (1998) Trends Cell Biol. 8: 310-318.

2. Choo K.H. (2000) Trends Cell Biol. 10: 182-188.
3. Muro Y., et al. (2000) Clin. Exp. Immunol. 120: 218-223.
4. Howman E.V., et al. (2000) Proc. Natl. Acad. Sci. USA 97: 1148-1153.