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## anti-CENPA antibody (Atto 488)





#### Overview

Quantity:	100 μg
Target:	CENPA
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CENPA antibody is conjugated to Atto 488
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

### **Product Details**

Immunogen:	Synthetic peptide corresponding to a portion of human CENP-A
Clone:	5A7-2E11
Isotype:	lgG1
Specificity:	Detects ~18 kDa. Recognizes Human CENP-A.
Cross-Reactivity:	Human
Purification:	Protein G Purified

## Target Details

Target:	CENPA
Alternative Name:	CENPA (CENPA Products)
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.

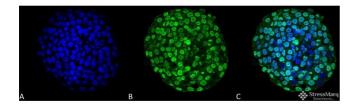
Gene ID:	1058
NCBI Accession:	NP_001035891
UniProt:	P49450
Pathways:	Chromatin Binding, Maintenance of Protein Location

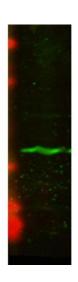
## **Application Details**

Application Notes:	<ul> <li>WB (1:1000)</li> <li>ICC/IF (1:100)</li> <li>optimal dilutions for assays should be determined by the user.</li> </ul>
Comment:	1 $\mu$ g/ml of ABIN2486486 was sufficient for detection of CENPA in 20 $\mu$ g of U2OS cell lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.
Restrictions:	For Research Use only

## Handling

Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C





#### Immunofluorescence (fixed cells)

Image 1. Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-CENP-A Monoclonal Antibody, Clone 5A7-2E11 . 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 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 Blotting**

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