

CENPA Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant CENPA.

Catalog # AT1493a

Product Information

Application	E
Primary Accession	P49450
Other Accession	BC000881
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1D4-1A3
Calculated MW	15991

Additional Information

Gene ID	1058
Other Names	Histone H3-like centromeric protein A, Centromere autoantigen A, Centromere protein A, CENP-A, CENPA
Target/Specificity	CENPA (AAH00881, 1 a.a. ~ 114 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CENPA Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

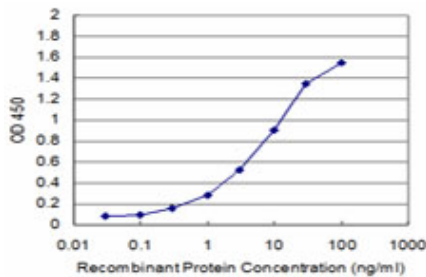
Background

Centromeres are the differentiated chromosomal domains that specify the mitotic behavior of chromosomes. CENPA encodes a centromere protein which contains a histone H3 related histone fold domain that is required for targeting to the centromere. CENPA is proposed to be a component of a modified nucleosome or nucleosome-like structure in which it replaces 1 or both copies of conventional histone H3 in the (H3-H4)₂ tetrameric core of the nucleosome particle. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

References

Dual recognition of CENP-A nucleosomes is required for centromere assembly. Carroll CW, et al. J Cell Biol, 2010 Jun 28. PMID 20566683. Molecular and evolutionary characteristics of the fraction of human alpha satellite DNA associated with CENP-A at the centromeres of chromosomes 1, 5, 19, and 21. Pironon N, et al. BMC Genomics, 2010 Mar 23. PMID 20331851. Building centromeres: home sweet home or a nomadic existence? Buscaino A, et al. Curr Opin Genet Dev, 2010 Apr. PMID 20206496. CENP-A reduction induces a p53-dependent cellular senescence response to protect cells from executing defective mitoses. Maehara K, et al. Mol Cell Biol, 2010 May. PMID 20160010. HJURP binds CENP-A via a highly conserved N-terminal domain and mediates its deposition at centromeres. Shuaib M, et al. Proc Natl Acad Sci U S A, 2010 Jan 26. PMID 20080577.

Images



Detection limit for recombinant GST tagged CENPA is approximately 0.3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.