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HMGN1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14219a

Product Information

Application	WB, IHC-P, E
Primary Accession	P05114
Other Accession	P02316, NP_004956.5
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB34198
Calculated MW	10659
Antigen Region	1-30

Additional Information

Gene ID	3150
Other Names	Non-histone chromosomal protein HMG-14, High mobility group nucleosome-binding domain-containing protein 1, HMGN1, HMG14
Target/Specificity	This HMGN1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human HMGN1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HMGN1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	HMGN1
Synonyms	HMG14

Function	Binds to the inner side of the nucleosomal DNA thus altering the interaction between the DNA and the histone octamer. May be involved in the process which maintains transcribable genes in a unique chromatin conformation. Inhibits the phosphorylation of nucleosomal histones H3 and H2A by RPS6KA5/MSK1 and RPS6KA3/RSK2 (By similarity).
Cellular Location	Nucleus. Cytoplasm. Note=Cytoplasmic enrichment upon phosphorylation. The RNA edited version localizes to the nucleus

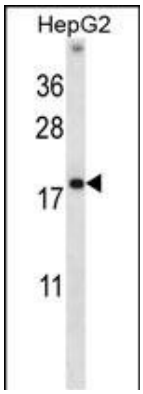
Background

Chromosomal protein HMG14 and its close analog HMG17 (MIM 163910) bind to the inner side of the nucleosomal DNA, potentially altering the interaction between the DNA and the histone octamer. The 2 proteins may be involved in the process that maintains transcribable genes in a unique chromatin conformation. Their ubiquitous distribution and relative abundance, as well as the high evolutionary conservation of the DNA-binding domain of the HMG14 family of proteins, suggest that they may be involved in an important cellular function.

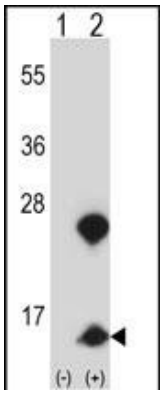
References

Rattner, B.P., et al. Mol. Cell 34(5):620-626(2009)
Cherukuri, S., et al. Mol. Biol. Cell 19(5):1816-1824(2008)
Zhu, N., et al. Mol. Cell. Biol. 27(24):8859-8873(2007)
Jiang, X.G., et al. Biochem. Biophys. Res. Commun. 345(4):1497-1503(2006)
Hu, Y.H., et al. BMC Genomics 7, 155 (2006) :

Images

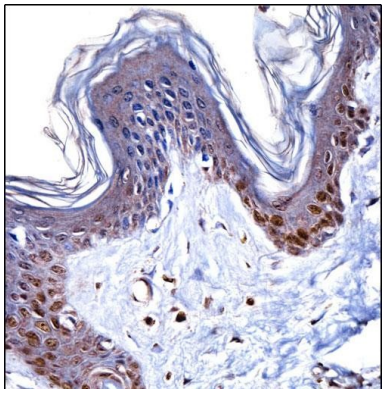


HMGN1 Antibody (N-term) (Cat. #AP14219a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the HMGN1 antibody detected the HMGN1 protein (arrow).



Western blot analysis of HMGN1 (arrow) using rabbit polyclonal HMGN1 Antibody (N-term) (Cat. #AP14219a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the HMGN1 gene.

HMGN1 Antibody (N-term) (AP14219a)immunohistochemistry analysis in formalin



fixed and paraffin embedded human skin tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of HMGN1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.