



HMG-14 (phospho Ser21) Polyclonal Antibody

Catalog No	YP-Ab-01430
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;IF;ELISA
Gene Name	HMGN1
Protein Name	Non-histone chromosomal protein HMG-14
Immunogen	The antiserum was produced against synthesized peptide derived from human HMG14 around the phosphorylation site of Ser21. AA range:10-59
Specificity	Phospho-HMG-14 (S21) Polyclonal Antibody detects endogenous levels of HMG-14 protein only when phosphorylated at S21.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	HMGN1; HMG14; Non-histone chromosomal protein HMG-14; High mobility group nucleosome-binding domain-containing protein 1
Observed Band	
Cell Pathway	Nucleus. Cytoplasm. Cytoplasmic enrichment upon phosphorylation. The RNA edited version localizes to the nucleus.
Tissue Specificity	Bone marrow,Brain,Epithelium,Liver,Ovary,Pooled,Skin,
Function	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.,mass spectrometry: PubMed:10739259,PTM:Phosphorylation on Ser-21 and Ser-25 weakens binding to nucleosomes and increases the rate of H3 phosphorylation (By similarity). Phosphorylation favors cytoplasmic localization.,RNA editing: Partially edited. A new initiator methionine may be created by a single uridine insertion in the 5'-UTR, causing an N-terminal extension of 45 amino acids. The existence of the RNA edited version is supported by direct protein sequencing by MS/MS of the following peptides specific to that version: 23-31 and 40-48. The RNA edited version is

Background

The protein encoded by this gene binds nucleosomal DNA and is associated with transcriptionally active chromatin. Along with a similar protein, HMG17, the encoded protein may help maintain an open chromatin configuration around transcribable genes. [provided by RefSeq, Aug 2011],

matters needing attention

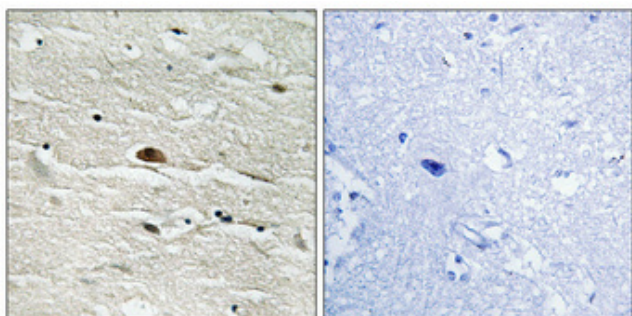
Avoid repeated freezing and thawing!

Usage suggestions

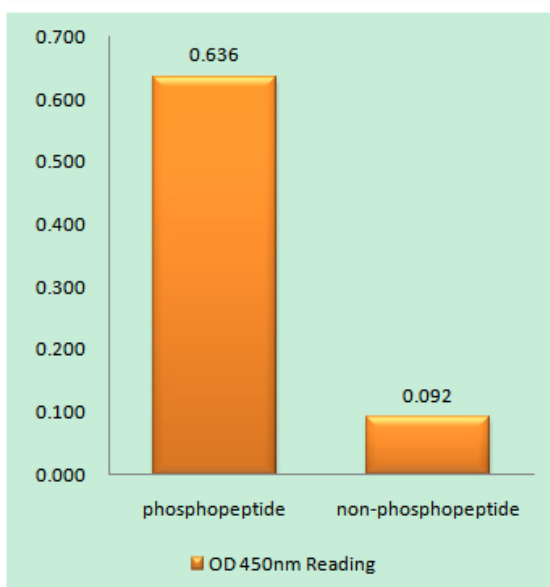
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



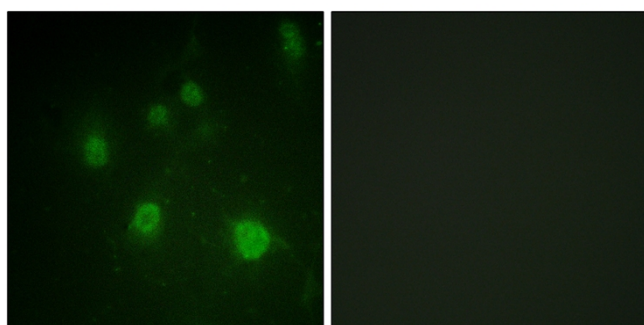
Products Images



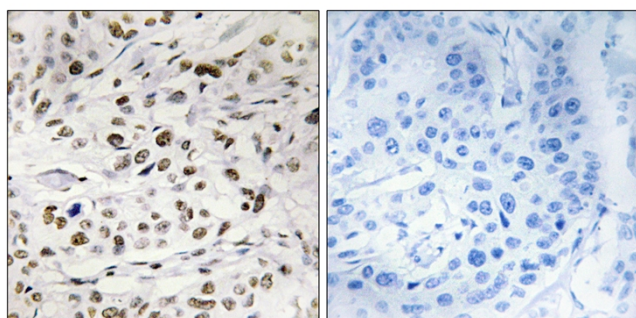
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA, pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using HMG14 (Phospho-Ser21) Antibody



Immunofluorescence analysis of COS7 cells, using HMG14 (Phospho-Ser21) Antibody. The picture on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using HMG14 (Phospho-Ser21) Antibody. The picture on the right is blocked with the phospho peptide.