

# Summary

Production Name	HMG-14 (phospho Ser21) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,IF,IHC,
Reactivity	Human, Mouse, Rat

## Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

## Immunogen

Gene Name	HMGN1
Alternative Names	HMGN1; HMG14; Non-histone chromosomal protein HMG-14; High mobility group
	nucleosome-binding domain-containing protein 1
Gene ID	3150.0
SwissProt ID	P05114.The antiserum was produced against synthesized peptide derived from human
	HMG14 around the phosphorylation site of Ser21. AA range:10-59

# Application

Dilution Ratio	IF 1:200 - 1:1000. IHC 1:100 - 1:300. ELISA: 1:10000. Not yet tested in other
	applications.



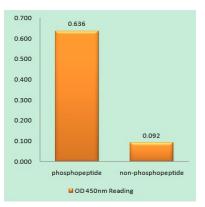
#### **Molecular Weight**

### 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],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 an 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 called ET-HMGN1.,similarity:Belongs to the HMGN family.,subcellular location:Cytoplasmic enrichment upon phosphorylation. The RNA edited version localizes to the nucleus.,

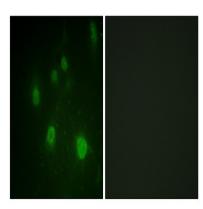
## **Research Area**

## Image Data

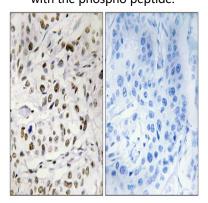


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using HMG14 (Phospho-Ser21) Antibody

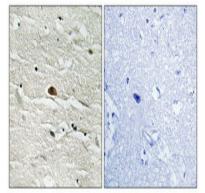




Immunofluorescence analysis of COS7 cells, using HMG14 (Phospho-Ser21) Antibody. The picture on the right is blocked with the phospho peptide.



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



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

### **Note** For research use only.

