

HMG-14 (phospho Ser21) Polyclonal Antibody

Catalog No: YP1153

Reactivity: Human; Mouse; Rat

Applications: IHC;IF;ELISA

Target: HMG-14

Gene Name: HMGN1

Protein Name: Non-histone chromosomal protein HMG-14

P05114

P18608

Human Gene Id: 3150

Human Swiss Prot

No:

Mouse Gene Id: 1.00044e+008

Mouse Swiss Prot

No:

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

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

applications.

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

1/3



Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 11kD

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 RefSeg, Aug 2011],

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 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

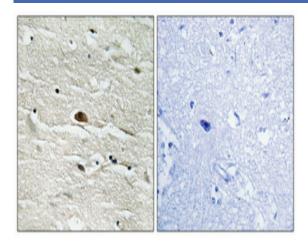
Subcellular Location :

Nucleus. Cytoplasmic enrichment upon phosphorylation. The RNA

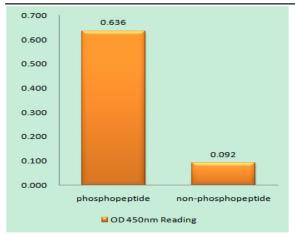
edited version localizes to the nucleus.

Expression: Bone marrow, Brain, Epithelium, Liver, Ovary, Pooled, Skin,

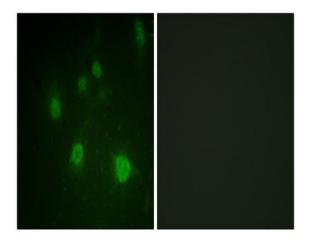
Products Images



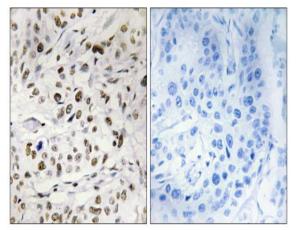
Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



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.