



Rabbit Anti-Histone binding protein/SLBP antibody

SL19791R

Product Name:	Histone binding protein/SLBP
Chinese Name:	组蛋白Binding proteinSLBP抗体
Alias:	Hairpin binding protein histone; HBP; Histone binding protein; Histone RNA hairpin binding protein; Histone RNA hairpin-binding protein; Histone stem-loop-binding protein; SLBP; SLBP_HUMAN; Stem loop (histone) binding protein; stem loop binding protein.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,Horse,Zebrafish,Firefly,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	30kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Histone binding protein/SLBP:121-220/270
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene encodes a protein that binds to the stem-loop structure in replication-

dependent histone mRNAs. Histone mRNAs do not contain introns or polyadenylation signals, and are processed by endonucleolytic cleavage. The stem-loop structure is essential for efficient processing but this structure also controls the transport, translation and stability of histone mRNAs. Expression of the protein is regulated during the cell cycle, increasing more than 10-fold during the latter part of G1. [provided by RefSeq, Jul 2008]

Function:

RNA-binding protein involved in the histone pre-mRNA processing. Binds the stem-loop structure of replication-dependent histone pre-mRNAs and contributes to efficient 3'-end processing by stabilizing the complex between histone pre-mRNA and U7 small nuclear ribonucleoprotein (snRNP), via the histone downstream element (HDE). Plays an important role in targeting mature histone mRNA from the nucleus to the cytoplasm and to the translation machinery. Stabilizes mature histone mRNA and could be involved in cell-cycle regulation of histone gene expression. Involved in the mechanism by which growing oocytes accumulate histone proteins that support early embryogenesis. Binds to the 5' side of the stem-loop structure of histone pre-mRNAs.

Subcellular Location:

Cytoplasm. Nucleus. Polyribosome-associated. Localizes predominantly in the nucleus at the G1/G2 phases and the beginning of S phase. Through the S phase, partially redistributes to the cytoplasm. Binding to histone mRNA is necessary for cytoplasmic localization. Shuttles between the nucleus and the cytoplasm. Imported in the nucleus by the Importin alpha/Importin beta receptor.

Tissue Specificity:

Widely expressed.

Post-translational modifications:

Phosphorylated on Thr-61 and Thr-62 in the S-phase. Phosphorylation of Thr-62 by CDK1 primes phosphorylation of Thr-61 by CK2. Phosphorylation of Thr-62 is required for its degradation by the proteasome at the end of the S phase. Its degradation is not required for histone mRNA degradation at the end of the S phase. All the phosphorylated forms detected are present in the cytoplasm. Both unphosphorylated and phosphorylated forms bind the stem-loop structure of histone mRNAs.

DISEASE:

Regulated during the cell cycle: protein levels increase 10 to 20 fold in the late G1 and decrease at the S/G2 border.

Similarity:

Belongs to the SLBP family.

SWISS:

Q14493

Gene ID:
7884

Database links:

[Entrez Gene: 422902](#) Chicken

[Entrez Gene: 444868](#) Cow

[Entrez Gene: 43448](#) Fruit fly (*Drosophila melanogaster*)

[Entrez Gene: 7884](#) Human

[Entrez Gene: 20492](#) Mouse

[Entrez Gene: 681062](#) Rat

[Entrez Gene: 407727](#) Zebrafish

[Omim: 602422](#) Human

[SwissProt: Q9VAN6](#) Fruit fly (*Drosophila melanogaster*)

[SwissProt: Q14493](#) Human

[SwissProt: P97440](#) Mouse

[Unigene: 4801](#) Fruit fly (*Drosophila melanogaster*)

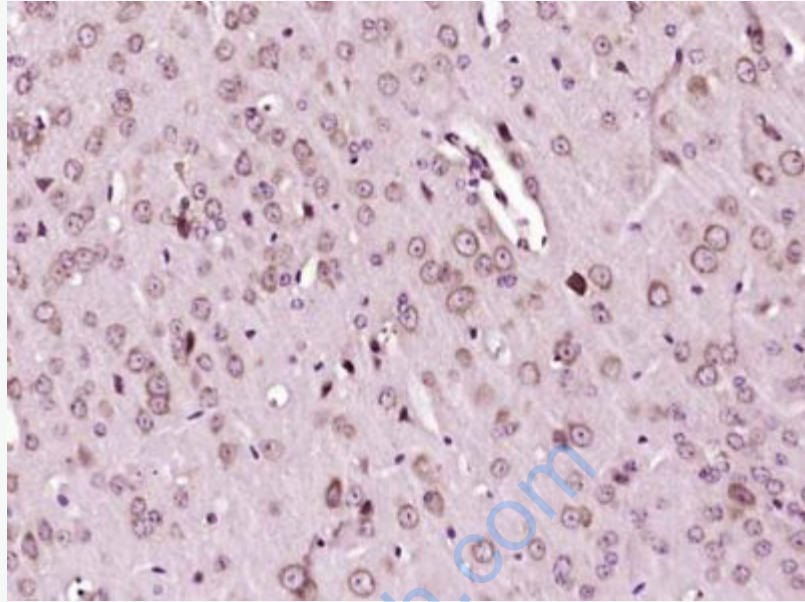
[Unigene: 298345](#) Human

[Unigene: 4172](#) Mouse

[Unigene: 198386](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SLBP) Polyclonal Antibody, Unconjugated (SL19791R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.