


Anti-SLBP antibody ab229677

2 Images

Overview

Product name	Anti-SLBP antibody
Description	Rabbit polyclonal to SLBP
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Cow, Pig, Chimpanzee 
Immunogen	Recombinant fragment within Human SLBP (internal sequence). The exact sequence is proprietary. Database link: Q14493
Positive control	WB: HepG2 whole cell and cytoplasm extracts. ICC/IF: HepG2 cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab229677 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 31 kDa.
ICC/IF		1/100 - 1/1000.

Target

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.

Tissue specificity

Widely expressed.

Sequence similarities

Belongs to the SLBP family.

Developmental stage

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

Domain

Amino acids 31-34, 96-99 and 241-244 are necessary for interaction with the Importin alpha/Importin beta receptor. The first 18 amino acids, amino acids 69-76 and 179-182 are necessary for interaction with TNPO3. Amino acids 31-34, 96-99 and 241-244 are necessary for nuclear localization.

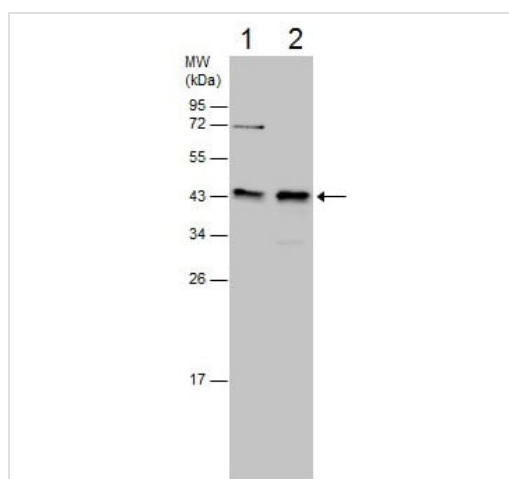
Post-translational modifications

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.

Cellular localization

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.

Images



Western blot - Anti-SLBP antibody (ab229677)

All lanes : Anti-SLBP antibody (ab229677) at 1/1000 dilution

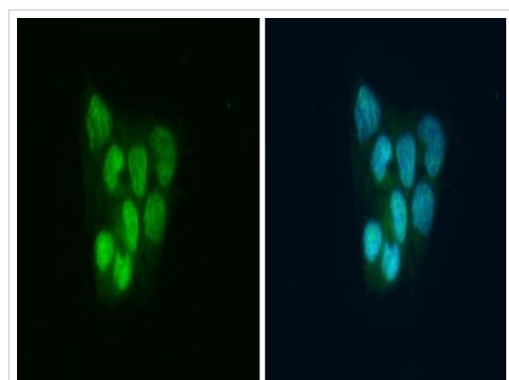
Lane 1 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell extract

Lane 2 : HepG2 (human liver hepatocellular carcinoma cell line) cytoplasm extract

Lysates/proteins at 30 µg per lane.

Predicted band size: 31 kDa

12% SDS-PAGE gel.



Immunocytochemistry/ Immunofluorescence - Anti-SLBP antibody (ab229677)

4% paraformaldehyde-fixed HepG2 (human liver hepatocellular carcinoma cell line) cells stained for SLBP (green) using ab229677 at 1/500 dilution in ICC/IF.

Nuclear counterstain: Hoechst 33342 (blue).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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