

Anti-CSL4 antibody [EPR13526] ab181108

Recombinant RabMAb

8 Images

Overview

Product name	Anti-CSL4 antibody [EPR13526]
Description	Rabbit monoclonal [EPR13526] to CSL4
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF, IP
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Raji, 293, K562, C6, Raw264.7, PC-12 and NIH/3T3 cell lysate. Human cervix carcinoma and colon tissue. 293 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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: 7.2 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR13526

Isotype

IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab181108 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		1/1000 - 1/10000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100 - 1/250.
IP		1/60.

Target

Function

Non-catalytic component of the RNA exosome complex which has 3'->5' exoribonuclease activity and participates in a multitude of cellular RNA processing and degradation events. In the nucleus, the RNA exosome complex is involved in proper maturation of stable RNA species such as rRNA, snRNA and snoRNA, in the elimination of RNA processing by-products and non-coding 'pervasive' transcripts, such as antisense RNA species and promoter-upstream transcripts (PROMPTs), and of mRNAs with processing defects, thereby limiting or excluding their export to the cytoplasm. The RNA exosome may be involved in Ig class switch recombination (CSR) and/or Ig variable region somatic hypermutation (SHM) by targeting AICDA deamination activity to transcribed dsDNA substrates. In the cytoplasm, the RNA exosome complex is involved in general mRNA turnover and specifically degrades inherently unstable mRNAs containing AU-rich elements (AREs) within their 3' untranslated regions, and in RNA surveillance pathways, preventing translation of aberrant mRNAs. It seems to be involved in degradation of histone mRNA. The catalytic inactive RNA exosome core complex of 9 subunits (Exo-9) is proposed to play a pivotal role in the binding and presentation of RNA for ribonucleolysis, and to serve as a scaffold for the association with catalytic subunits and accessory proteins or complexes. EXOSC1 as peripheral part of the Exo-9 complex stabilizes the hexameric ring of RNase PH-domain subunits through contacts with EXOSC6 and EXOSC8.

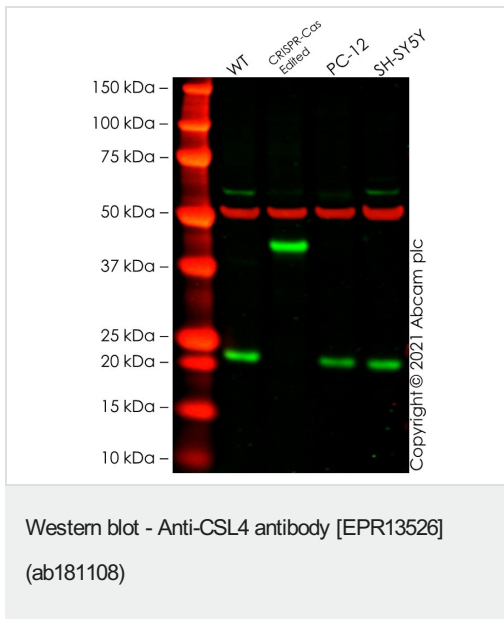
Sequence similarities

Contains 1 S1 motif domain.

Cellular localization

Nucleus > nucleolus. Nucleus. Cytoplasm.

Images



All lanes : Anti-CSL4 antibody [EPR13526] (ab181108) at 1/1000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : EXOSC1 CRISPR-Cas9 edited HeLa cell lysate

Lane 3 : PC-12 cell lysate

Lane 4 : SH-SY5Y cell lysate

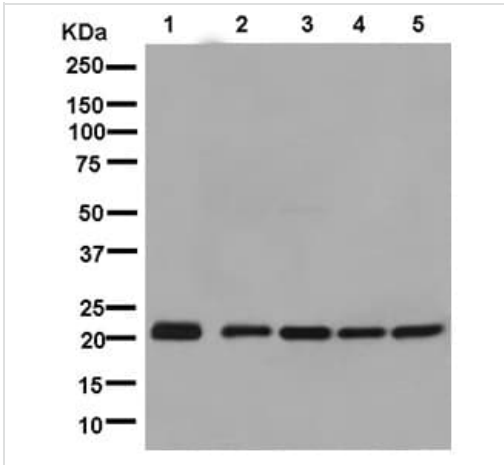
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 21 kDa

Observed band size: 22 kDa

False colour image of Western blot: Anti-CSL4 antibody [EPR13526] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab181108 was shown to bind specifically to CSL4. A band was observed at 22 kDa in wild-type HeLa cell lysates with no signal observed at this size in EXOSC1 CRISPR-Cas9 edited cell line [ab265194](#) (EXOSC1 CRISPR-Cas9 edited cell lysate [ab257945](#)). The band observed in the CRISPR-Cas9 edited lysate lane above 22 kDa is likely to represent CSL4 with an insertion. This has not been investigated further and the functional properties of the gene product have not been determined. To generate this image, wild-type and EXOSC1 CRISPR-Cas9 edited HeLa cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1 % Tween[®] 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye[®] 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Anti-CSL4 antibody [EPR13526] (ab181108)

All lanes : Anti-CSL4 antibody [EPR13526] (ab181108) at 1/2000 dilution

Lane 1 : K562 cell lysate

Lane 2 : C6 cell lysate

Lane 3 : Raw264.7 cell lysate

Lane 4 : PC-12 cell lysate

Lane 5 : NIH/3T3 cell lysate

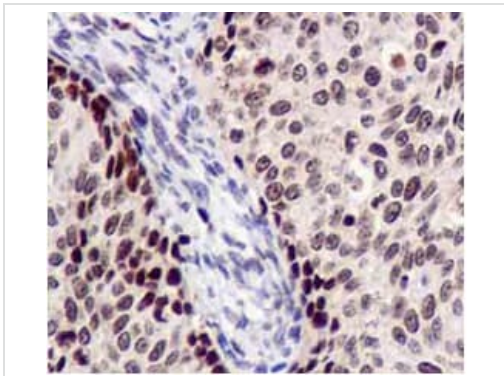
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 21 kDa

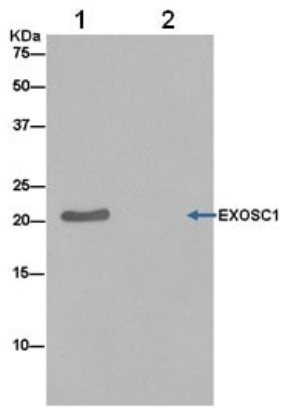
Observed band size: 21 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CSL4 antibody [EPR13526] (ab181108)

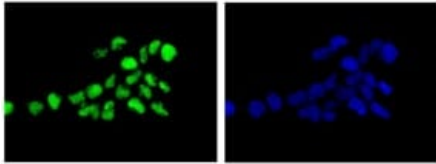
Immunohistochemical analysis of paraffin-embedded Human cervix tissue labeling CSL4 with ab181108 at 1/100 dilution. Counter stain Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



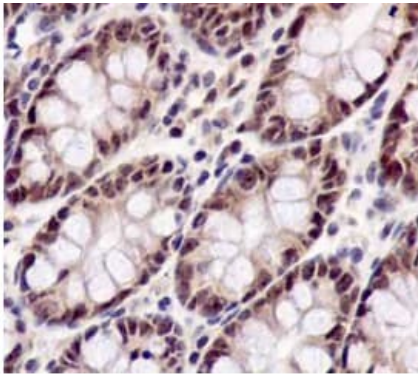
Immunoprecipitation - Anti-CSL4 antibody
[EPR13526] (ab181108)

Western blot analysis of CSL4 in immunoprecipitation pellets from Raji lysate. ab181108 used at 1/60 dilution. Secondary antibody Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1500. Lane 2 shows negative control.



Immunocytochemistry/ Immunofluorescence - Anti-CSL4 antibody [EPR13526] (ab181108)

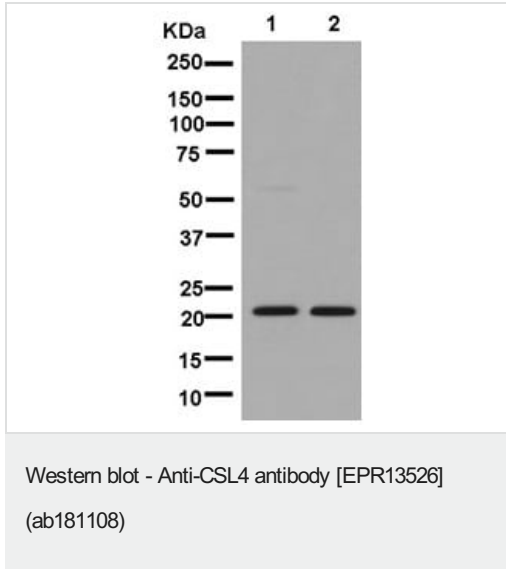
Immunofluorescent analysis of 4% paraformaldehyde fixed 293 cells labeling CSL4 with ab181108 at 1/250 dilution. Secondary antibody Goat anti rabbit IgG (Alexa Fluor®488), Counterstained with DAPI blue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CSL4 antibody
[EPR13526] (ab181108)

Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling CSL4 with ab181108 at 1/100 dilution. Counter stain Hematoxylin.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



All lanes : Anti-CSL4 antibody [EPR13526] (ab181108) at 1/10000 dilution

Lane 1 : Raji cell lysate

Lane 2 : 293 cell lysate

Lysates/proteins at 10 µg per lane.





Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

Anti-CSL4 antibody [EPR13526] (ab181108)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery

- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors