abcam

ab181167

Anti-CSL4 antibody [EPR13525]

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR13525
Purification technique	Affinity purification Protein A
Concentration	0.495 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1/50 - 1/100
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/40 - 1/60
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000 - 1/10000
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/100 - 1/250
Notes	-

Predicted

Species	Mouse
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/90
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Predicted

Species	Mouse
Dilution info	-
Notes	-

Target data

See full target information EXOSC1

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.

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

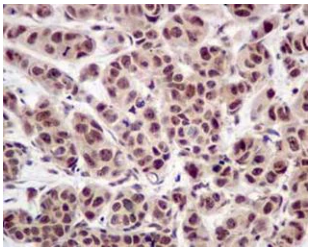
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

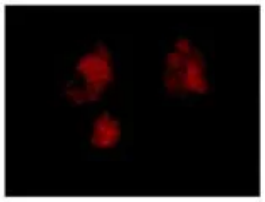
6 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CSL4 antibody [EPR13525] (ab181167)

CSL4 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CSL4 antibody

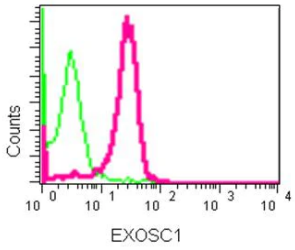
Immunohistochemical analysis of paraffin embedded Human breast carcinoma tissue labeling CSL4 with ab181167 at a 1/100 dilution. Prediluted HRP Polymer for Rabbit IgG secondary used. Counterstained with Hematoxylin.
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-CSL4 antibody [EPR13525] (ab181167)

CSL4 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-CSL4 antibody

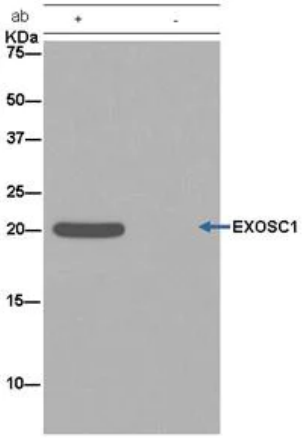
Immunofluorescence analysis of HepG2 cells (fixative 4% paraformaldehyde) labeling CSL4 with ab181167 at a 1/250 dilution. Goat anti rabbit IgG (Alexa Fluor® 555) secondary used at a 1/200 diution.



Flow Cytometry (Intracellular) - Anti-CSL4 antibody [EPR13525] (ab181167)

CSL4 Flow Cytometry (Intracellular) staining using rabbit Anti-CSL4 antibody

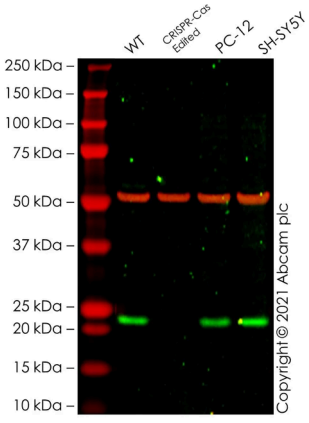
Intracellular Flow Cytometry analysis of K562 cells using ab181167at a 1/90 dilution (red) or a Rabbit monoclonal IgG (negative) (green). Goat anti rabbit IgG (FITC) secondary used at a 1/150 dilution.



Immunoprecipitation - Anti-CSL4 antibody [EPR13525] (ab181167)

Detection of Human CSL4 by Western Blot of Immunoprecipitate. 293T whole cell lysate (lane 1) and a negative control (lane 2) loaded, ab181167 used for blotting immunoprecipitated CSL4 at a 1/50 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG secondary used at a 1/1500 dilution.
All lanes:
Immunoprecipitation - Anti-CSL4 antibody [EPR13525] (ab181167)

Predicted band size: 21 kDa



Western blot - Anti-CSL4 antibody [EPR13525] (ab181167)

CSL4 Western blot staining using rabbit Anti-CSL4 antibody

False colour image of Western blot: Anti-CSL4 antibody [EPR13525] 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, ab181167 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.
All lanes:
Western blot - Anti-CSL4 antibody [EPR13525] (ab181167) at 1/1000 dilution

Lane 1:
Wild-type HeLa cell lysate at 20 µg

Lane 2:
EXOSC1 CRISPR-Cas9 edited HeLa cell lysate at 20 µg

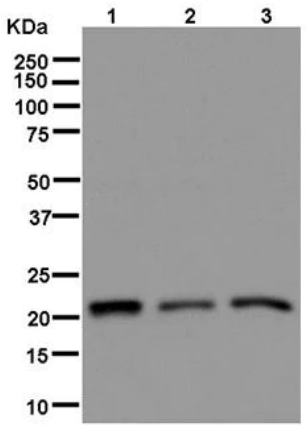
Lane 3:
PC-12 cell lysate at 20 µg

Lane 4:
SH-SY5Y cell lysate at 20 µg

Performed under reducing conditions.

Predicted band size: 21 kDa

Observed band size: 22 kDa



Western blot - Anti-CSL4 antibody [EPR13525] (ab181167)

All lanes:
Western blot - Anti-CSL4 antibody [EPR13525] (ab181167) at 1/2000 dilution

Lane 1:
293T cell lysate at 20 µg

Lane 2:
Jurkat cell lysate at 20 µg

Lane 3:
HepG2 cell lysate at 20 µg

Secondary

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

Predicted band size: 21 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.