# abcam

## Product datasheet

## Anti-CPSF73 antibody [EPR7468] ab131245



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#### Overview

**Product name** Anti-CPSF73 antibody [EPR7468]

**Description** Rabbit monoclonal [EPR7468] to CPSF73

**Host species** Rabbit

**Tested applications** Suitable for: Flow Cyt (Intra), WB, ICC/IF

Unsuitable for: IHC-P or IP

Species reactivity Reacts with: Mouse. Rat. Human

**Immunogen** Synthetic peptide within Human CPSF73 aa 650-750. The exact sequence is proprietary.

Positive control WB: HeLa, 293T, Jurkat, Caco-2, RAW 264.7, PC-12, and NIH/3T3 cell lysates. ICC/IF: HeLa

cells. Flow Cyt (intra): HeLa cells.

**General notes** 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 production

For more information see here.

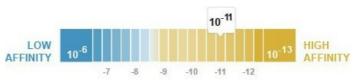
Our  $\mathsf{RabMAb}^{\texttt{®}}$  technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

## **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

 $K_D = 1.70 \times 10^{-11} M$ Dissociation constant (K<sub>D</sub>)



Learn more about K<sub>D</sub>

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

**Purity** Tissue culture supernatant

Clonality Monoclonal Clone number **EPR7468** 

Isotype ΙgG

## **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab131245 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
Flow Cyt (Intra)		1/250.
WB	*** <u>*</u>	1/1000 - 1/10000. Predicted molecular weight: 77 kDa.
ICC/IF	*** <u>*</u> (1)	1/50 - 1/100.

**Application notes** 

Is unsuitable for IHC-P or IP.

## **Target**

#### **Function**

Component of the cleavage and polyadenylation specificity factor (CPSF) complex that play a key role in pre-mRNA 3'-end formation, recognizing the AAUAAA signal sequence and interacting with poly(A) polymerase and other factors to bring about cleavage and poly(A) addition. Has endonuclease activity, and functions as mRNA 3'-end-processing endonuclease. Also involved in the histone 3'-end pre-mRNA processing. U7 snRNP-dependent protein that induces both the 3'endoribonucleolytic cleavage of histone pre-mRNAs and acts as a 5' to 3' exonuclease for degrading the subsequent downstream cleavage product (DCP) of mature histone mRNAs. Cleavage occurs after the 5'-ACCCA-3' sequence in the histone pre-mRNA leaving a 3'hydroxyl group on the upstream fragment containing the stem loop (SL) and 5' phosphate on the downstream cleavage product (DCP) starting with CU nucleotides. The U7-dependent 5' to 3' exonuclease activity is processive and degrades the DCP RNA substrate even after complete removal of the U7-binding site. Binds to the downstream cleavage product (DCP) of histone premRNAs and the cleaved DCP RNA substrate in a U7 snRNP dependent manner.

## Sequence similarities

Belongs to the metallo-beta-lactamase superfamily. RNA-metabolizing metallo-beta-lactamase-

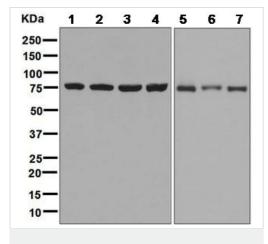
like family. CPSF3 subfamily.

## Post-translational modifications

Sumoylated on Lys-462, Lys-465 and Lys-545, preferentially by SUMO3.

**Cellular localization** Nucleus.

## **Images**



Western blot - Anti-CPSF73 antibody [EPR7468] (ab131245)

All lanes: Anti-CPSF73 antibody [EPR7468] (ab131245) at

1/1000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : 293T cell lysate

Lane 3: Jurkat cell lysate

Lane 4: Caco-2 cell lysate

Lane 5: RAW 264.7 cell lysate

Lane 6: PC-12 cell lysate

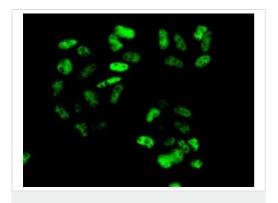
Lane 7: NIH/3T3 cell lysate

Lysates/proteins at 10 µg per lane.

## **Secondary**

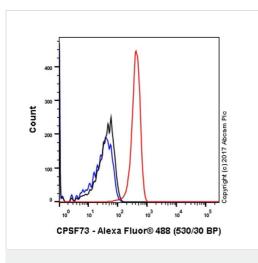
All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 77 kDa



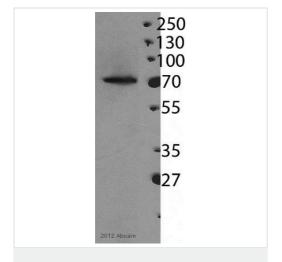
Immunocytochemistry/ Immunofluorescence - Anti-CPSF73 antibody [EPR7468] (ab131245)

Immunofluorescence analysis of HeLa cells labelling CPSF73 with ab131245 at 1/50 dilution.

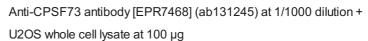


Flow Cytometry (Intracellular) - Anti-CPSF73 antibody [EPR7468] (ab131245)

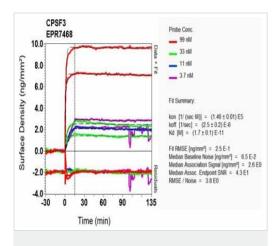
Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling CPSF73 (red) with ab131245 at a 1/250 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit lgG (Alexa Fluorr<sup>®</sup> 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal lgG (ab172730). Blue (unlabeled control) - Cells without incubation with primary and secondary antibodies.



Western blot - Anti-CPSF73 antibody [EPR7468] (ab131245)



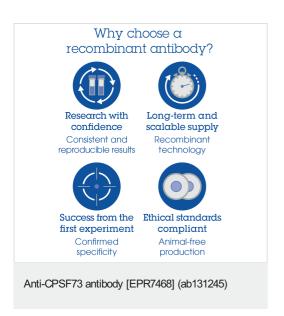




OI-RD Scanning - Anti-CPSF73 antibody [EPR7468] (ab131245)

Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

## Click here to learn more about KD



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