

# CPSF4 (K-17): sc-79418

## BACKGROUND

CPSF4 (cleavage and polyadenylation specificity factor subunit 4, NS1 effector domain-binding protein 1) is a nuclear protein that belongs to the CPSF4/YTH1 family and contains five C<sub>2</sub>H<sub>1</sub>-type zinc fingers and one CCHC-type zinc finger. CPSF4 is a component of the cleavage and polyadenylation specificity factor (CPSF) complex that plays a key role in pre-mRNA 3'-end formation. CPSF is a multi-subunit factor consisting of four subunits. CPSF recognizes the AAUAAA signal in the pre-mRNA and interacts with other proteins to facilitate both RNA cleavage and poly(A) synthesis. The largest subunit of CPSF can, by itself, bind preferentially to AAUAAA-containing RNAs and binds specifically to both the suppressor of forked subunit of the cleavage stimulatory factor (CstF) and to poly(A) polymerase. snRNP-A protein (U1 snRNP-A) interacts with and affects the activity of CPSF by stabilizing the interaction of CPSF with the AAUAAA-containing RNAs to increase the efficiency of polyadenylation. Efficient processing of 3' core poly(A) site also requires specific sequences located 76 nucleotides upstream of the AAUAAA hexamer.

## CHROMOSOMAL LOCATION

Genetic locus: CPSF4 (human) mapping to 7q22.1; Cpsf4 (mouse) mapping to 5 G2.

## SOURCE

CPSF4 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CPSF4 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79418 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

CPSF4 (K-17) is recommended for detection of CPSF4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CPSF4 (K-17) is also recommended for detection of CPSF4 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CPSF4 siRNA (h): sc-72988, CPSF4 siRNA (m): sc-72989, CPSF4 shRNA Plasmid (h): sc-72988-SH, CPSF4 shRNA Plasmid (m): sc-72989-SH, CPSF4 shRNA (h) Lentiviral Particles: sc-72988-V and CPSF4 shRNA (m) Lentiviral Particles: sc-72989-V.

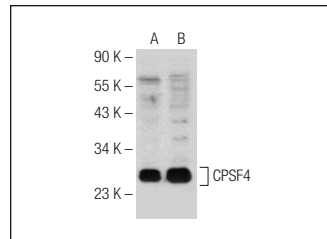
Molecular Weight of CPSF4: 30 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or Jurkat nuclear extract: sc-2132.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



CPSF4 (K-17): sc-79418. Western blot analysis of CPSF4 expression in Jurkat whole cell lysate (A) and Jurkat nuclear extract (B).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **CPSF4 (A-11): sc-393316** or **CPSF4 (F-8): sc-514752**, our highly recommended monoclonal alternatives to CPSF4 (K-17).