

CPSF2 (P-20): sc-26658

BACKGROUND

3' ends of eukaryotic mRNAs can undergo processing events that include endonucleolytic cleavage and polyadenylation. Cleavage and polyadenylation specificity factor (CPSF) mediates 3' cleavage of the transcript and subsequent polyadenylation. CPSF contains four subunits and localizes to the nucleoplasm where it recognizes the AAUAAA signal in pre-mRNA and interacts with other proteins to facilitate RNA cleavage and poly(A) synthesis. The human CPSF2 gene maps to chromosome 14q32.12 and encodes the second largest subunit of cleavage and polyadenylation specificity factor. U1 snRNP-A protein (U1A) 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.

CHROMOSOMAL LOCATION

Genetic locus: CPSF2 (human) mapping to 14q32.12; Cpsf2 (mouse) mapping to 12 E.

SOURCE

CPSF2 (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CPSF2 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-26658 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

CPSF2 (P-20) is recommended for detection of CPSF2 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).

CPSF2 (P-20) is also recommended for detection of CPSF2 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for CPSF2 siRNA (h): sc-105242, CPSF2 siRNA (m): sc-142546, CPSF2 shRNA Plasmid (h): sc-105242-SH, CPSF2 shRNA Plasmid (m): sc-142546-SH, CPSF2 shRNA (h) Lentiviral Particles: sc-105242-V and CPSF2 shRNA (m) Lentiviral Particles: sc-142546-V.

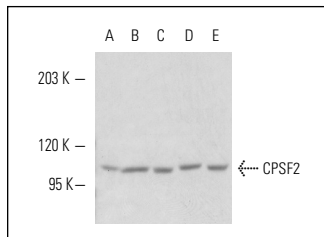
Molecular Weight of CPSF2: 103 kDa.

Positive Controls: BJAB nuclear extract: sc-2145, Ramos nuclear extract: sc-2153 or HeLa nuclear extract: sc-2120.

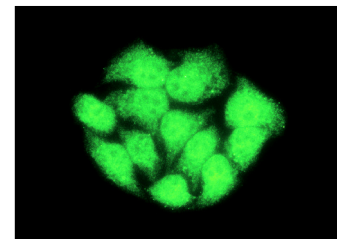
RECOMMENDED SECONDARY REAGENTS

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



CPSF2 (P-20): sc-26658. Western blot analysis of CPSF2 expression in BJAB (A), Ramos (B), HeLa (C), HL-60 (D) and Jurkat (E) nuclear extracts.



CPSF2 (P-20): sc-26658. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

- Baudino, T.A., et al. 2008. Cell patterning: interaction of cardiac myocytes and fibroblasts in three-dimensional culture. *Microsc. Microanal.* 14: 117-125.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **CPSF2 (A-11): sc-165983** or **CPSF2 (A-9): sc-398589**, our highly recommended monoclonal alternatives to CPSF2 (P-20).