CPSF6 (H-59): sc-292170

BACKGROUND

3' ends of eukaryotic mRNAs can undergo processing events that include endonucleolytic cleavage and polyadenylation. Cleavage and polyadenylation specificity factors (CPSF) mediate 3' cleavage of the transcript and subsequent polyadenylation. CPSF6, also known as CFlm68 (mammalian cleavage factor I, 68 kDa subunit), HPBRII-4 or HPBRII-7, is a member of the CPSF6/7 family and contains an N-terminal RNA recognition motif (RRM) and a C-terminal RS-like domain. Via its RS-like domain, CPSF6 interacts with SRp20, Tra-2β and 9G8. CPSF6 localizes to the paraspeckles and forms a heterodimer with NUDT21, comprising the CFlm complex which is essential for the first step in pre-mRNA 3' cleavage and polyadenylation processing. CPSF6 is the larger subunit of the complex and is present in only half of the two heterodimer combinations (the other half being a dimer of NUDT21 and CPSF7).

REFERENCES

1. Jenny, A., et al. 1996. Sequence similarity between the 73-kilodalton protein of mammalian CPSF and a subunit of yeast polyadenylation factor I. Science 274: 1514-1517.

2. Salinas, C.A., et al. 1998. Characterization of a *Drosophila* homologue of the 160-kDa subunit of the cleavage and polyadenylation specificity factor CPSF. Mol. Gen. Genet. 257: 672-680.

3. Edmonds, M. 2002. A history of poly A sequences: from formation to factors to function. Prog. Nucleic Acid Res. Mol. Biol. 71: 285-389.

4. Dettwiler, S., et al. 2004. Distinct sequence motifs within the 68-kDa subunit of cleavage factor Im mediate RNA binding, protein-protein interactions, and subcellular localization. J. Biol. Chem. 279: 35788-35797.

5. López-Camarillo, C., et al. 2005. *Entamoeba histolytica:* comparative genomics of the pre-mRNA 3' end processing machinery. Exp. Parasitol. 110: 184-190.

6. Millevoi, S., et al. 2006. An interaction between U2AF65 and CF I(m) links the splicing and 3' end processing machineries. EMBO J. 25: 4854-4864.

CHROMOSOMAL LOCATION

Genetic locus: CPSF6 (human) mapping to 12q15; Cpsf6 (mouse) mapping to 10 D2.

SOURCE

CPSF6 (H-59) is a rabbit polyclonal antibody raised against amino acids 167-225 mapping within an internal region of CPSF6 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.

STORAGE

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

APPLICATIONS

CPSF6 (H-59) is recommended for detection of CPSF6 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).

CPSF6 (H-59) is also recommended for detection of CPSF6 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for CPSF6 siRNA (h): sc-72990, CPSF6 siRNA (m): sc-72991, CPSF6 shRNA Plasmid (h): sc-72990-SH, CPSF6 shRNA Plasmid (m): sc-72991-SH, CPSF6 shRNA (h) Lentiviral Particles: sc-72990-V and CPSF6 shRNA (m) Lentiviral Particles: sc-72991-V.

Molecular Weight of CPSF6: 68 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

MONOS
Satisfation
Guaranteed

Try **CPSF6 (F-3): sc-376228** or **CPSF6 (L16): sc-100692**, our highly recommended monoclonal alternatives to CPSF6 (H-59).