

CPSF3 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP14804c**Specification**

CPSF3 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q9UKF6](#)**CPSF3 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 51692**Other Names**

Cleavage and polyadenylation specificity factor subunit 3, 3127-, Cleavage and polyadenylation specificity factor 73 kDa subunit, CPSF 73 kDa subunit, mRNA 3'-end-processing endonuclease CPSF-73, CPSF3, CPSF73

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CPSF3 Antibody (Center) Blocking Peptide - Protein Information**Name** CPSF3**Synonyms** CPSF73**Function**

Component of the cleavage and polyadenylation specificity factor (CPSF) complex that plays 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 an mRNA 3'-end-processing endonuclease (PubMed:30507380). Also involved in the histone 3'-end pre-mRNA processing (PubMed:30507380). 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 pre-mRNAs and the cleaved DCP RNA substrate in a U7 snRNP dependent manner. Required for entering/progressing through S-phase of the cell cycle (PubMed:30507380). Required for the selective processing of microRNAs (miRNAs) during embryonic stem cell differentiation via its interaction with ISY1 (By similarity). Required for the biogenesis of all miRNAs from the pri-miR-17-92 primary transcript except miR-92a (By similarity). Only required for the biogenesis of miR-290 and miR-96 from the pri-miR-290-295 and pri-miR-96-183 primary transcripts, respectively (By similarity).

Cellular Location

Nucleus.

CPSF3 Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

CPSF3 Antibody (Center) Blocking Peptide - Images**CPSF3 Antibody (Center) Blocking Peptide - Background**

Most eukaryotic mRNA precursors (pre-mRNAs) undergo extensive maturational processing, including cleavage and polyadenylation at the 3-prime end. CPSF3 encodes the 73-kD subunit of the cleavage and polyadenylation specificity factor (CPSF) and is the pre-mRNA 3-prime-end-processing endonuclease (Mandel et al., 2006 [PubMed 17128255]).

CPSF3 Antibody (Center) Blocking Peptide - References

Rozenblatt-Rosen, O., et al. Proc. Natl. Acad. Sci. U.S.A. 106(3):755-760(2009) Zhu, Z.H., et al. Oncogene 28(1):41-51(2009) Yang, X.C., et al. Mol. Cell. Biol. 29(1):31-42(2009) Kolev, N.G., et al. EMBO Rep. 9(10):1013-1018(2008) de la Vega, L., et al. J. Mol. Biol. 372(2):317-330(2007)