

CPSF4 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9617c

Specification

CPSF4 Antibody (Center) Blocking Peptide - Product Information

Primary Accession <u>095639</u>

CPSF4 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 10898

Other Names

Cleavage and polyadenylation specificity factor subunit 4, Cleavage and polyadenylation specificity factor 30 kDa subunit, CPSF 30 kDa subunit, NS1 effector domain-binding protein 1, Neb-1, No arches homolog, CPSF4, CPSF30, NAR, NEB1

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.

CPSF4 Antibody (Center) Blocking Peptide - Protein Information

Name CPSF4

Synonyms CPSF30, NAR, NEB1

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. CPSF4 binds RNA polymers with a preference for poly(U).

Cellular Location

Nucleus.

CPSF4 Antibody (Center) Blocking Peptide - Protocols

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





• Blocking Peptides

CPSF4 Antibody (Center) Blocking Peptide - Images

CPSF4 Antibody (Center) Blocking Peptide - Background

Inhibition of the nuclear export of poly(A)-containing mRNAs caused by the influenza A virus NS1 protein requires its effector domain. The NS1 effector domain functionally interacts with the cellular 30 kDa subunit of cleavage and polyadenylation specific factor 4, an essential component of the 3' end processing machinery of cellular pre-mRNAs. In influenza virus-infected cells, the NS1 protein is physically associated with cleavage and polyadenylation specific factor 4, 30kD subunit. Binding of the NS1 protein to the 30 kDa protein in vitro prevents CPSF binding to the RNA substrate and inhibits 3' end cleavage and polyadenylation of host pre-mRNAs. Thus the NS1 protein selectively inhibits the nuclear export of cellular, and not viral, mRNAs.

CPSF4 Antibody (Center) Blocking Peptide - References

Twu, K.Y., et al. J. Virol. 81(15):8112-8121(2007)Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)Kaufmann, I., et al. EMBO J. 23(3):616-626(2004)de Vries, H., et al. EMBO J. 19(21):5895-5904(2000)