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CPSF4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9617c

Product Information

Application	WB, E
Primary Accession	O95639
Other Accession	Q6DJP7, Q5FVR7, O19137
Reactivity	Human
Predicted	Bovine, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23266
Calculated MW	30255
Antigen Region	96-123

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
Target/Specificity	This CPSF4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 96-123 amino acids from the Central region of human CPSF4.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CPSF4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

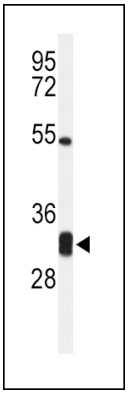
Background

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.

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)

Images



Western blot analysis of CPSF4 Antibody (Center) (Cat. #AP9617c) in Jurkat cell line lysates (35ug/lane).CPSF4 (arrow) was detected using the purified Pab.