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CPSF6 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20278a

Product Information

Application	WB, E
Primary Accession	Q16630
Other Accession	Q6DDW4, Q6NVF9, Q6NWC6, Q5ZL34, Q0P5D2, NP_008938.2
Reactivity	Human
Predicted	Bovine, Chicken, Zebrafish, Mouse, Xenopus, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42780
Calculated MW	59210
Antigen Region	23-51

Additional Information

Gene ID	11052
Other Names	Cleavage and polyadenylation specificity factor subunit 6, Cleavage and polyadenylation specificity factor 68 kDa subunit, CFIm68, CPSF 68 kDa subunit, Pre-mRNA cleavage factor Im 68 kDa subunit, Protein HPBRII-4/7, CPSF6, CFIM68
Target/Specificity	This CPSF6 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 23-51 amino acids from the N-terminal region of human CPSF6.
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	CPSF6 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CPSF6 (HGNC:13871)

Function	Component of the cleavage factor Im (CFIm) complex that functions as an activator of the pre-mRNA 3'-end cleavage and polyadenylation processing required for the maturation of pre-mRNA into functional mRNAs (PubMed:14690600, PubMed:29276085, PubMed:8626397, PubMed:9659921). CFIm contributes to the recruitment of multiprotein complexes on specific sequences on the pre-mRNA 3'-end, so called cleavage and polyadenylation signals (pA signals) (PubMed:14690600, PubMed:8626397, PubMed:9659921). Most pre-mRNAs contain multiple pA signals, resulting in alternative cleavage and polyadenylation (APA) producing mRNAs with variable 3'-end formation (PubMed:23187700, PubMed:29276085). The CFIm complex acts as a key regulator of cleavage and polyadenylation site choice during APA through its binding to 5'- UGUA-3' elements localized in the 3'-untranslated region (UTR) for a huge number of pre-mRNAs (PubMed:20695905, PubMed:29276085). CPSF6 enhances NUDT21/CPSF5 binding to 5'-UGUA-3' elements localized upstream of pA signals and promotes RNA looping, and hence activates directly the mRNA 3'-processing machinery (PubMed:15169763, PubMed:21295486, PubMed:29276085). Plays a role in mRNA export (PubMed:19864460).
Cellular Location	Nucleus. Nucleus, nucleoplasm. Nucleus speckle. Cytoplasm. Note=Shuttles between the nucleus and the cytoplasm in a transcription- and XPO1/CRM1-independent manner, most probably in complex with the cleavage factor Im complex (CFIm) (PubMed:19864460). Colocalizes with PSPC1 in punctate subnuclear structures often located adjacent to nuclear speckles, called paraspeckles, and corresponding to interchromatin granules-associated zones (IGAZs) (PubMed:17267687). Distribution in speckles and paraspeckles varies during the cell cycle (PubMed:17267687). Associates at sites of active transcription on nascent perichromatin fibrils (PFs) and perichromatin granules (PubMed:17267687). Nuclear import is mediated via interaction with TNPO3 independently of CPSF6 phosphorylation status (PubMed:30916345).

Background

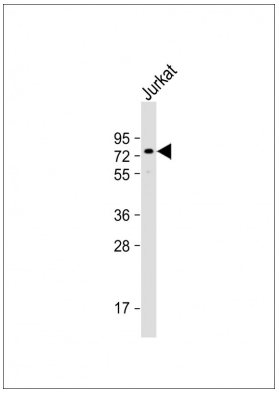
The protein encoded by this gene is one subunit of a cleavage factor required for 3' RNA cleavage and polyadenylation processing. The interaction of the protein with the RNA is one of the earliest steps in the assembly of the 3' end processing complex and facilitates the recruitment of other processing factors. The cleavage factor complex is composed of four polypeptides. This gene encodes the 68kD subunit. It has a domain organization reminiscent of spliceosomal proteins.

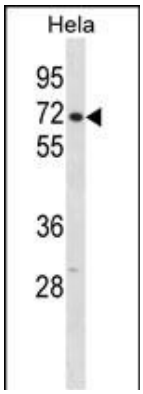
References

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Ruepp, M.D., et al. Mol. Biol. Cell 20(24):5211-5223(2009)
Xin, X., et al. Genome Res. 19(7):1262-1269(2009)
Maggi, L.B. Jr., et al. Mol. Cell. Biol. 28(23):7050-7065(2008)
Gudbjartsson, D.F., et al. Nat. Genet. 40(5):609-615(2008)

Images

Anti-CPSF6 Antibody (N-term) at 1:1000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 59 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





CPSF6 Antibody (N-term) (Cat. #AP20278a) western blot analysis in Hela cell line lysates (35ug/lane).This demonstrates the CPSF6 antibody detected the CPSF6 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.