

KD-Validated Anti-CPSF6 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI2201

Product Information

Application	WB, FC, ICC
Primary Accession	Q16630
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB145
Calculated MW	59210
Gene Name	CPSF6
Aliases	CPSF6; Cleavage And Polyadenylation Specific Factor 6; CFIM68; Cleavage Factor Im Complex 68 KDa Subunit; HPBRII-4; HPBRII-7; CFIM72; CFIM; Cleavage And Polyadenylation Specificity Factor 68 KDa Subunit; Cleavage And Polyadenylation Specificity Factor Subunit 6; Cleavage And Polyadenylation Specific Factor 6, 68kDa; Pre-mRNA Cleavage Factor Im 68 KDa Subunit; CPSF 68 KDa Subunit; Protein HPBRII-4/7; Cleavage And Polyadenylation Specific Factor 6, 68kD Subunit; Pre-mRNA Cleavage Factor I, 68kD Subunit; Pre-mRNA Cleavage Factor Im (68kD); CFIm68
Immunogen	A synthesized peptide derived from human CPSF6

Additional Information

Gene ID	11052
Other Names	Cleavage and polyadenylation specificity factor subunit 6, Cleavage and polyadenylation specificity factor 68 kDa subunit, CPSF 68 kDa subunit, Cleavage factor Im complex 68 kDa subunit, CFIm68, Pre-mRNA cleavage factor Im 68 kDa subunit, Protein HPBRII-4/7, CPSF6 (HGNC:13871)

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).

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