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CPSF3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CPSF3.
Catalog # AT1610a

Product Information

Application	WB, IF, E
Primary Accession	Q9UKF6
Other Accession	NM_016207
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	6E7
Calculated MW	77486

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
Target/Specificity	CPSF3 (NP_057291, 585 a.a. ~ 684 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CPSF3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

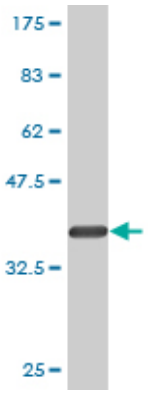
Most eukaryotic mRNA precursors (pre-mRNAs) undergo extensive maturational processing, including cleavage and polyadenylation at the 3-prime end. CPSF3 encodes the 73-kD subunit of the cleavage and polyadenylation specificity factor (CPSF) and is the pre-mRNA 3-prime-end-processing endonuclease (Mandel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

References

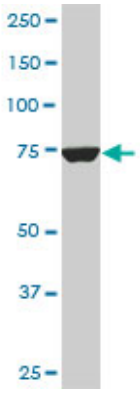
The tumor suppressor Cdc73 functionally associates with CPSF and CstF 3' mRNA processing factors.

Rozenblatt-Rosen O, et al. Proc Natl Acad Sci U S A, 2009 Jan 20. PMID 19136632.Studies of the 5' exonuclease and endonuclease activities of CPSF-73 in histone pre-mRNA processing. Yang XC, et al. Mol Cell Biol, 2009 Jan. PMID 18955505.CSR1 induces cell death through inactivation of CPSF3. Zhu ZH, et al. Oncogene, 2009 Jan 8. PMID 18806823.Conserved motifs in both CPSF73 and CPSF100 are required to assemble the active endonuclease for histone mRNA 3'-end maturation. Kolev NG, et al. EMBO Rep, 2008 Oct. PMID 18688255.The 73 kDa subunit of the CPSF complex binds to the HIV-1 LTR promoter and functions as a negative regulatory factor that is inhibited by the HIV-1 Tat protein. de la Vega L, et al. J Mol Biol, 2007 Sep 14. PMID 17669424.

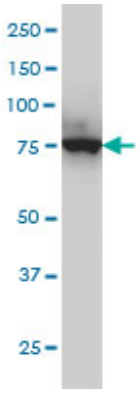
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .

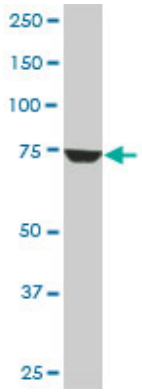


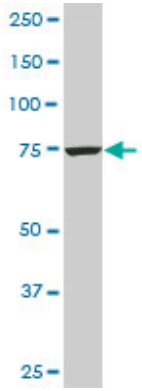
CPSF3 monoclonal antibody (M01), clone 6E6. Western Blot analysis of CPSF3 expression in PC-12((Cat # AT1610a)



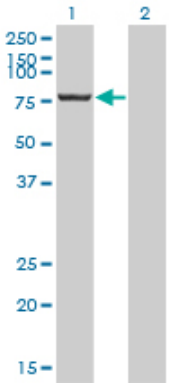
CPSF3 monoclonal antibody (M01), clone 6E6 Western Blot analysis of CPSF3 expression in Hela S3 NE ((Cat # AT1610a)

CPSF3 monoclonal antibody (M01), clone 6E6. Western Blot analysis of CPSF3 expression in Raw 264.7((Cat # AT1610a)



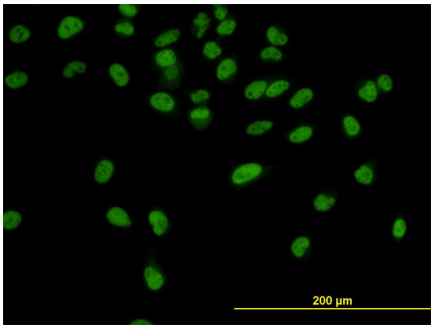


CPSF3 monoclonal antibody (M01), clone 6E6. Western Blot analysis of CPSF3 expression in NIH/3T3((Cat # AT1610a)

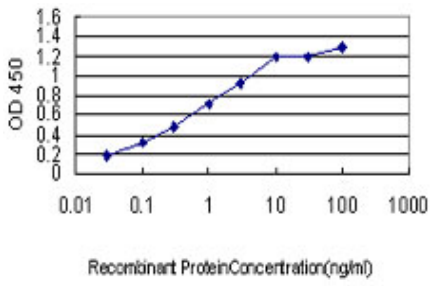


Western Blot analysis of CPSF3 expression in transfected 293T cell line by CPSF3 monoclonal antibody (M01), clone 6E6.

Lane 1: CPSF3 transfected lysate(77.5 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to CPSF3 on HeLa cell. [antibody concentration 10 ug/ml]



Detection limit for recombinant GST tagged CPSF3 is approximately 0.1ng/ml as a capture antibody.

Citations

- CPSF3-dependent pre-mRNA processing as a druggable node in AML and Ewing's sarcoma

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