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SF3A2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20040c

Product Information

Application	WB, E
Primary Accession	Q15428
Other Accession	Q6AXT8, Q62203, A5PJN8, NP_009096.2
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42212
Calculated MW	49256
Antigen Region	166-194

Additional Information

Gene ID	8175
Other Names	Splicing factor 3A subunit 2, SF3a66, Spliceosome-associated protein 62, SAP 62, SF3A2, SAP62
Target/Specificity	This SF3A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 166-194 amino acids from the Central region of human SF3A2.
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	SF3A2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SF3A2
Synonyms	SAP62

Function	Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:10882114, PubMed:11533230, PubMed:32494006, PubMed:34822310). The 17S U2 SnRNP complex (1) directly participates in early spliceosome assembly and (2) mediates recognition of the intron branch site during pre-mRNA splicing by promoting the selection of the pre-mRNA branch-site adenosine, the nucleophile for the first step of splicing (PubMed:10882114, PubMed:11533230, PubMed:32494006, PubMed:34822310). Within the 17S U2 SnRNP complex, SF3A2 is part of the SF3A subcomplex that contributes to the assembly of the 17S U2 snRNP, and the subsequent assembly of the pre-spliceosome 'E' complex and the pre-catalytic spliceosome 'A' complex (PubMed:10882114, PubMed:11533230). Involved in pre-mRNA splicing as a component of pre-catalytic spliceosome 'B' complexes, including the Bact complex (PubMed:29360106, PubMed:29361316, PubMed:30315277). Interacts directly with the duplex formed by U2 snRNA and the intron (PubMed:29360106).
Cellular Location	Nucleus {ECO:0000255|PROSITE-ProRule:PRU00130, ECO:0000269|PubMed:10882114, ECO:0000269|PubMed:21349847, ECO:0000269|PubMed:29360106, ECO:0000269|PubMed:29361316, ECO:0000269|PubMed:30315277}

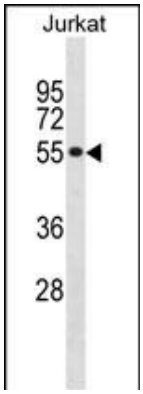
Background

This gene encodes subunit 2 of the splicing factor 3a protein complex. The splicing factor 3a heterotrimer includes subunits 1, 2 and 3 and is necessary for the in vitro conversion of 15S U2 snRNP into an active 17S particle that performs pre-mRNA splicing. Subunit 2 interacts with subunit 1 through its amino-terminus while the single zinc finger domain of subunit 2 plays a role in its binding to the 15S U2 snRNP. Subunit 2 may also function independently of its RNA splicing function as a microtubule-binding protein.

References

Rose, J. Phd, et al. Mol. Med. (2010) In press :
Tanackovic, G., et al. Mol. Biol. Cell 16(3):1366-1377(2005)
Nesic, D., et al. J. Cell. Sci. 117 (PT 19), 4423-4433 (2004) :
Takenaka, K., et al. Biochem. J. 382 (PT 1), 223-230 (2004) :
Colland, F., et al. Genome Res. 14(7):1324-1332(2004)

Images



SF3A2 Antibody (Center) (Cat. #AP20040c) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the SF3A2 antibody detected the SF3A2 protein (arrow).

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