

SAP62 Rabbit pAb

Catalog # AP98169

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q15428
Other Accession	Q15428
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49256
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SAP62
Epitope Specificity	65-160/464
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the SF3A2 family. Contains 1 matrin-type zinc finger.
SUBUNIT	Component of splicing factor SF3A which is composed of three subunits; SF3A3/SAP61, SF3A2/SAP62, SF3A1/SAP114. SF3A associates with the splicing factor SF3B and a 12S RNA unit to form the U2 small nuclear ribonucleoproteins complex (U2 snRNP). Identified in the spliceosome C complex. Interacts with HTATSF1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SAP 62, also known as SF3A2 (Splicing factor 3A subunit 2), PRP11, PRPF11 or SF3a66, is a 464 amino acid protein that contains one matrin-type zinc finger and belongs to the SF3A2 family. Localized to the nucleus, SAP 62 is a subunit of the SF3A splicing factor, a heterotrimeric complex comprised of three subunits that act in tandem to mediate the binding of U2 snRNP to the branchpoint sequence (BPS) in pre-mRNA. The SF3A complex is necessary for the conversion of 15S U2 snRNP into the active 17S protein that performs directly in pre-mRNA splicing events. Functioning as the second subunit of the complex, SAP 62 interacts with subunit 1 (SAP 114) via its N-terminus while simultaneously binding to 15S U2 snRNP via its zinc finger domain. In addition to its role in RNA splicing, SAP 62 is thought to act independently as a microtubule-binding protein.

Additional Information

Gene ID	8175
Other Names	PRP11; PRPF11; SAP62; SF3a66; 66kDa; SFA66; SF3A2_HUMAN; SF3A2; Spliceosome-associated protein 62 (SAP 62); SF3A2_MOUSE; SF3A2_RAT; splicing factor 3a subunit 2; splicing factor 3a, subunit 2, 66kD; splicing factor 3a, subunit 2, 66kDa
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
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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}

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