

SF3A3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57619

Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>Q12874</u>

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 58849
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human SF3A3

Epitope Specificity 21-120/501 **Isotype** IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus speckle.

SIMILARITY Belongs to the SF3A3 family.

SUBUNIT Identified in the spliceosome C complex. 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).

Interacts with SF3A1, through its N-terminal region.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions This gene encodes subunit 3 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 3 interacts with subunit 1 through its amino-terminus while the zinc finger domain of subunit 3 plays a role in its binding to the 15S U2 snRNP. This gene has a pseudogene on chromosome

20. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID 10946

Other Names Splicing factor 3A subunit 3, SF3a60, Spliceosome-associated protein 61, SAP

61, SF3A3, SAP61

Target/Specificity Ubiquitous.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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.

Protein Information

Name SF3A3

Synonyms SAP61

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, PubMed:8022796). 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, SF3A3 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 (PubMed: 29360106,

PubMed:30315277).

Cellular Location Nucleus speckle. Nucleus

Tissue Location Ubiquitous...

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