10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SAP 14 Polyclonal Antibody

Catalog # AP72393

Product Information

Application	WB, E
Primary Accession	Q9Y3B4
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	14585

Additional Information

Gene ID	51639
Other Names	SF3B14; CGI-110; HSPC175; HT006; Pre-mRNA branch site protein p14; SF3b 14 kDa subunit
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/40000. Not yet tested in other applications. E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

Name	SF3B6
Synonyms	SAP14, SF3B14, SF3B14A
Function	Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:12234937, PubMed:27720643, 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:12234937, PubMed:32494006, PubMed:34822310). Within the 17S U2 SnRNP complex, SF3B6 is part of the SF3B subcomplex, which is required for 'A' complex assembly formed by the stable binding of U2 snRNP to the branchpoint sequence in pre-mRNA (PubMed:12234937, PubMed:27720643). Sequence independent binding of SF3A and SF3B subcomplexes upstream of the branch site is essential, it may anchor U2 snRNP to the pre-mRNA (PubMed:12234937). Within the 17S U2 SnRNP complex, SF3B6 directly contacts the pre-mRNA branch site adenosine for the first catalytic step of

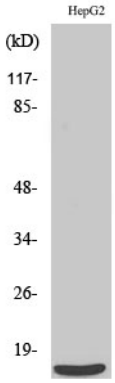
splicing (PubMed:16432215). SF3B6 stabilizes the intron branch site-U2 snRNA duplex, thereby promoting- binding of introns with poor sequence complementarity (PubMed:34822310). Also acts as a component of the minor spliceosome, which is involved in the splicing of U12-type introns in pre-mRNAs (PubMed:15146077, PubMed:33509932).

Cellular Location Nucleus

Background

Involved in pre-mRNA splicing as a component of the splicing factor SF3B complex (PubMed: 27720643). SF3B complex is required for 'A' complex assembly formed by the stable binding of U2 snRNP to the branchpoint sequence (BPS) in pre-mRNA (PubMed:12234937). Directly contacts the pre-mRNA branch site adenosine for the first catalytic step of splicing (PubMed:16432215). Enters the spliceosome and associates with the pre-mRNA branch site as part of the 17S U2 or, in the case of the minor spliceosome, as part of the 18S U11/U12 snRNP complex, and thus may facilitate the interaction of these snRNP with the branch sites of U2 and U12 respectively (PubMed:16432215).

Images



Western Blot analysis of various cells using SAP 14 Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).

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