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Goat Anti-SAP130 / SF3B3 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1956a

Specification

Goat Anti-SAP130 / SF3B3 Antibody - Product Information

Application	**WB, E**
Primary Accession	Q15393
Other Accession	NP_036558, 23450, 101943 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat, Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**135577**

Goat Anti-SAP130 / SF3B3 Antibody - Additional Information

Gene ID 23450

Other Names
Splicing factor 3B subunit 3, Pre-mRNA-splicing factor SF3b 130 kDa subunit, SF3b130, STAF130, Spliceosome-associated protein 130, SAP 130, SF3B3, KIAA0017, SAP130

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-SAP130 / SF3B3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-SAP130 / SF3B3 Antibody - Protein Information

Name SF3B3

Synonyms KIAA0017, SAP130 {ECO:0000303|PubMed:104

Function
Component of the 17S U2 SnRNP complex of the spliceosome, a large ribonucleoprotein complex that removes introns from transcribed pre-mRNAs (PubMed:10490618, PubMed:10882114, PubMed:12234937, PubMed:27720643, PubMed:28781166, 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, SF3B3 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). May also be involved in the assembly of the 'E' complex (PubMed:10882114). 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

Goat Anti-SAP130 / SF3B3 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-SAP130 / SF3B3 Antibody - Images

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AF1956a staining (0.1 µg/ml) of nuclear lysate from HeLa cells (RIPA buffer, 30 µg total protein per lane). Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-SAP130 / SF3B3 Antibody - Background

This gene encodes subunit 3 of the splicing factor 3b protein complex. Splicing factor 3b, together with splicing factor 3a and a 12S RNA unit, forms the U2 small nuclear ribonucleoproteins complex (U2 snRNP). The splicing factor 3b/3a complex binds pre-mRNA upstream of the intron's branch site in a sequence independent manner and may anchor the U2 snRNP to the pre-mRNA. Splicing factor 3b is also a component of the minor U12-type spliceosome. Subunit 3 has also been identified as a component of the STAGA (SPT3-TAF(II)31-GCN5L acetylase) transcription coactivator-HAT (histone acetyltransferase) complex, and the TFTC (TATA-binding-protein-free TAF(II)-containing complex). These complexes may function in chromatin modification, transcription, splicing, and DNA repair.

Goat Anti-SAP130 / SF3B3 Antibody - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614.
Proteomic analysis reveals Hrs ubiquitin-interacting motif-mediated ubiquitin signaling in multiple cellular processes. Pridgeon JW, et al. FEBS J, 2009 Jan. PMID 19019082.
Systematic analysis of the protein interaction network for the human transcription machinery reveals the identity of the 7SK capping enzyme. Jeronimo C, et al. Mol Cell, 2007 Jul 20. PMID 17643375.
Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.
A human protein-protein interaction network: a resource for annotating the proteome. Stelzl U, et al. Cell, 2005 Sep 23. PMID 16169070.