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

SNRPG Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20758a

Product Information

Application	WB, IF, E
Primary Accession	P62308
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB49820
Calculated MW	8496

Additional Information

Gene ID	6637
Other Names	Small nuclear ribonucleoprotein G, snRNP-G, Sm protein G, Sm-G, SmG, SNRPG, PBSCG
Target/Specificity	This SNRPG antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 2-36 amino acids from the N-terminal region of human SNRPG.
Dilution	WB~~1:1000 IF~~1:25 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	SNRPG Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SNRPG
Synonyms	PBSCG
Function	Plays a role in pre-mRNA splicing as a core component of the spliceosomal U1, U2, U4 and U5 small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome (PubMed:11991638, PubMed:18984161,

PubMed:19325628, PubMed:23333303, PubMed:25555158, PubMed:26912367, PubMed:28076346, PubMed:28502770, PubMed:28781166, PubMed:32494006). Component of both the pre-catalytic spliceosome B complex and activated spliceosome C complexes (PubMed:11991638, PubMed:28076346, PubMed:28502770, PubMed:28781166). As a component of the minor spliceosome, involved in the splicing of U12-type introns in pre-mRNAs (PubMed:15146077). As part of the U7 snRNP it is involved in histone 3'-end processing (PubMed:12975319).

Cellular Location Cytoplasm, cytosol. Nucleus. Note=SMN- mediated assembly into core snRNPs occurs in the cytosol before SMN- mediated transport to the nucleus to be included in spliceosomes

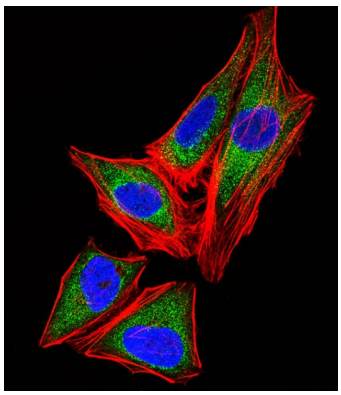
Background

Core component of the spliceosomal U1, U2, U4 and U5 small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome. Thereby, plays an important role in the splicing of cellular pre-mRNAs. Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in an heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP. Appears to function in the U7 snRNP complex that is involved in histone 3'- end processing.

References

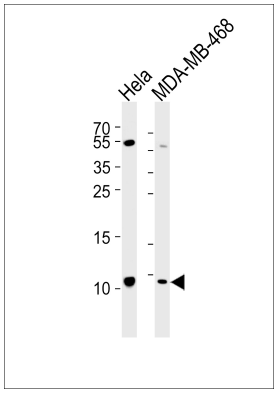
Hermann H.,et al.EMBO J. 14:2076-2088(1995).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 434:724-731(2005).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Pillai R.S.,et al.EMBO J. 20:5470-5479(2001).

Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Hela (Human Cervical epithelial adenocarcinoma cell line) cells labeling SNRPG with AP20758a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (NK179883) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on Hela cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).The nuclear counter stain is DAPI (blue).

Western blot analysis of lysates from Hela, MDA-MB-468 cell line (from left to right), using SNRPG Antibody (N-term)(Cat. #AP20758a). AP20758a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



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