

For Research Use Only

GRSF1 Polyclonal antibody, PBS Only

Catalog Number:30992-1-PBS



Basic Information

Catalog Number:

30992-1-PBS

Size:

100ug, Concentration: 1 mg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG34305

GenBank Accession Number:

NM_002092

GeneID (NCBI):

2926

UNIPROT ID:

Q12849

Full Name:

G-rich RNA sequence binding factor 1

Calculated MW:

53 kDa

Observed MW:

50-53 kDa

Purification Method:

Antigen affinity Purification

Applications

Tested Applications:

WB, IHC, IF/ICC, Indirect ELISA

Species Specificity:

human

Background Information

Grsf1 (G-rich RNA sequence binding factor 1) is an RNA-binding protein, which belongs to the F/H family of heterogeneous ribonucleoprotein, and contains three quasi-RNA recognition motifs (qRRM). These domains enable it to bind to RNA molecules, and it interacts with various RNA molecules, including mRNA, lncRNA and circRNA, affecting the metabolism and function of these RNAs. The expression of GRSF1 is closely related to cell senescence. It was found that with the aging of cells, the methylation level in the promoter region of GRSF1 gene increased, which led to the decrease of its expression. The decrease of GRSF1 expression is related to the activation of various aging-related markers and the increase of the secretion of aging-related secretory phenotype (SASP) factors, which may play a key role in maintaining the normal function of cells and delaying the aging process. GRSF1 also plays an important role in the mitochondria of cells. It interacts with RNase P and participates in the processing of mitochondrial RNA, including the processing of classical and tRNA-free RNA precursors. In the case of GRSF1 deletion, the primary transcript of mitochondrial RNA is cut abnormally, which leads to the decrease of the expression of mitochondrial coding protein, and then causes mitochondrial dysfunction. Isoform 1, 53 kDa, located in mitochondria; Isoform 2, 36 kDa, located in cytoplasm.

Storage

Storage:

Store at -80°C.

Storage Buffer:

PBS only, pH7.3

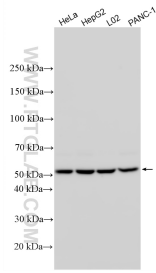
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

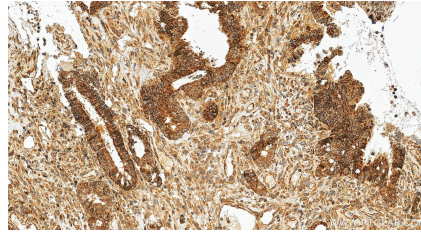
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

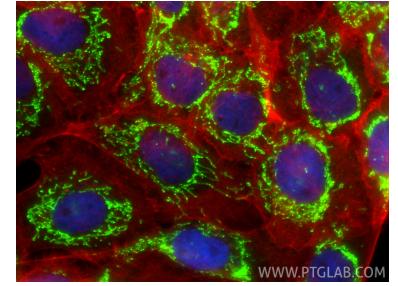
Selected Validation Data



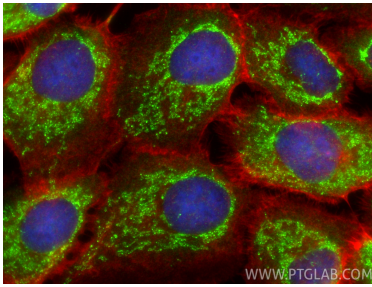
Various lysates were subjected to SDS PAGE followed by western blot with 30992-1-AP (GRSF1 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 30992-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 30992-1-AP (GRSF1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 30992-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed A431 cells using GRSF1 antibody (30992-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 30992-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (-20°C Ethanol) fixed U-251 cells using GRSF1 antibody (30992-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 30992-1-PBS in a different storage buffer formulation.