

KD-Validated Anti-G-rich RNA sequence binding factor 1 Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1978**Specification****KD-Validated Anti-G-rich RNA sequence binding factor 1 Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	Q12849
Reactivity	Human
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 53 kDa , observed, 53 kDa kDa
Gene Name	GRSF1
Aliases	GRSF1; G-Rich RNA Sequence Binding Factor 1; G-Rich Sequence Factor 1; GRSF-1
Immunogen	A synthesized peptide derived from human GRSF1

KD-Validated Anti-G-rich RNA sequence binding factor 1 Rabbit Monoclonal Antibody - Additional Information

Gene ID	2926
Other Names	
G-rich sequence factor 1, GRSF-1, GRSF1	

KD-Validated Anti-G-rich RNA sequence binding factor 1 Rabbit Monoclonal Antibody - Protein Information**Name** GRSF1**Function**

Regulator of post-transcriptional mitochondrial gene expression, required for assembly of the mitochondrial ribosome and for recruitment of mRNA and lncRNA. Binds RNAs containing the 14 base G- rich element. Preferentially binds RNAs transcribed from three contiguous genes on the light strand of mtDNA, the ND6 mRNA, and the long non-coding RNAs for MT-CYB and MT-ND5, each of which contains multiple consensus binding sequences (PubMed:[23473033](http://www.uniprot.org/citations/23473033), PubMed:[23473034](http://www.uniprot.org/citations/23473034), PubMed:[29967381](http://www.uniprot.org/citations/29967381)). Involved in the degradosome-mediated decay of non- coding mitochondrial transcripts (MT-ncRNA) and tRNA-like molecules (PubMed:[29967381](http://www.uniprot.org/citations/29967381)). Acts by unwinding G-quadruplex RNA structures in MT- ncRNA, thus facilitating their degradation by the degradosome (PubMed:[29967381](http://www.uniprot.org/citations/29967381)). G-quadruplexes (G4) are non-canonical 4 stranded structures formed by transcripts from the light strand of mtDNA (PubMed:[29967381](http://www.uniprot.org/citations/29967381))

target="_blank">29967381).

Cellular Location

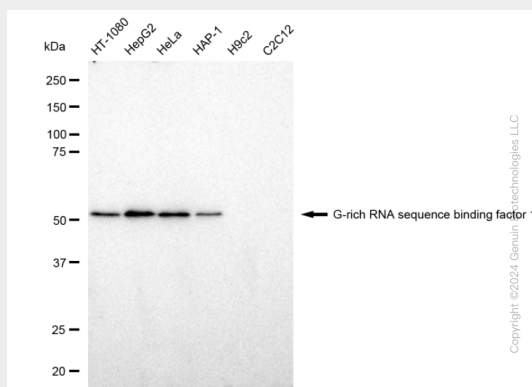
[Isoform 1]: Mitochondrion matrix Note=Localizes to mitochondrial RNA granules found in close proximity to the mitochondrial nucleoids.

KD-Validated Anti-G-rich RNA sequence binding factor 1 Rabbit Monoclonal Antibody - Protocols

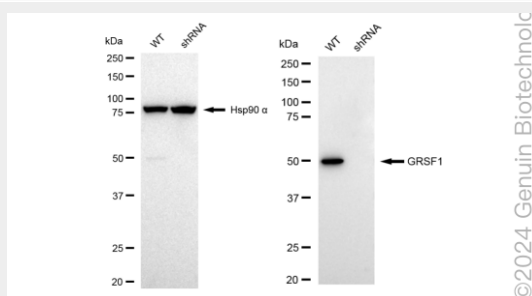
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

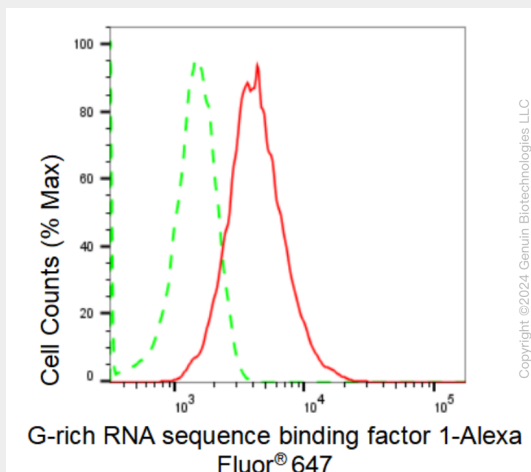
KD-Validated Anti-G-rich RNA sequence binding factor 1 Rabbit Monoclonal Antibody - Images



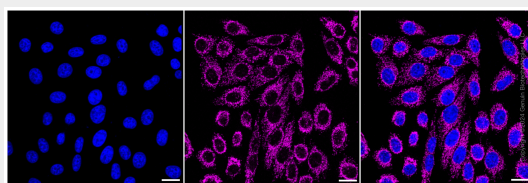
Western blotting analysis using anti-G-rich RNA sequence binding factor 1 antibody (Cat#AGI1978). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-G-rich RNA sequence binding factor 1 antibody (Cat#AGI1978, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-GRSF1 antibody (Cat#AGI1978). GRSF1 expression in wild type (WT) and GRSF1 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-GRSF1 antibody (Cat#AGI1978, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of G-rich RNA sequence binding factor 1 expression in HepG2 cells using G-rich RNA sequence binding factor 1 antibody (Cat#AGI1978, 1:2,000). Green, isotype control; red, G-rich RNA sequence binding factor 1.



Immunocytochemical staining of HepG2 cells with G-rich RNA sequence binding factor 1 antibody (Cat#AGI1978, 1:1,000). Nuclei were stained blue with DAPI; G-rich RNA sequence binding factor 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.