

GRSF1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17673c

Specification

GRSF1 Antibody (Center) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>Q12849</u> <u>Q8C5Q4</u>, <u>NP_002083.3</u> Human Mouse Rabbit Polyclonal Rabbit IgG 53126 307-333

GRSF1 Antibody (Center) - Additional Information

Gene ID 2926

Other Names G-rich sequence factor 1, GRSF-1, GRSF1

Target/Specificity This GRSF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 307-333 amino acids from the Central region of human GRSF1.

Dilution WB~~1:1000 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 aliguots to prevent freeze-thaw cycles.

Precautions GRSF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GRSF1 Antibody (Center) - 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 IncRNA. 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, PubMed:23473034, PubMed:29967381). Involved in the degradosome-mediated decay of non-coding mitochondrial transcripts (MT-ncRNA) and tRNA-like molecules (PubMed:29967381). Acts by unwinding G-quadruplex RNA structures in MT- ncRNA, thus facilitating their degradation by the degradosome (PubMed:29967381). G-quadruplexes (G4) are non-canonical 4 stranded structures formed by transcripts from the light strand of mtDNA (PubMed:29967381).

Cellular Location

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

GRSF1 Antibody (Center) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GRSF1 Antibody (Center) - Images



GRSF1 Antibody (Center) (Cat. #AP17673c) western blot analysis in MDA-MB453 cell line lysates (35ug/lane).This demonstrates the GRSF1 antibody detected the GRSF1 protein (arrow).

GRSF1 Antibody (Center) - Background

The protein encoded by this gene is a cellular protein that binds RNAs containing the G-rich element. The protein is localized in the cytoplasm, and has been shown to stimulate translation of viral mRNAs in vitro. Multiple transcript variants encoding different isoforms have been found for this gene.



GRSF1 Antibody (Center) - References

Kash, J.C., et al. J. Virol. 76(20):10417-10426(2002) Park, Y.W., et al. Proc. Natl. Acad. Sci. U.S.A. 96(12):6694-6699(1999) Banga, S.S., et al. Cytogenet. Cell Genet. 73(4):295-296(1996) Qian, Z., et al. Nucleic Acids Res. 22(12):2334-2343(1994)