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GRSF1 Antibody

Rabbit mAb
Catalog # AP93053

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	Q12849
Reactivity	Human
Clonality	Monoclonal
Other Names	GRSF1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	53126

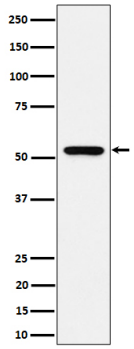
Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human GRSF1
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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, 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.

Images



Western blot analysis of GRSF1 expression in 293 cell lysate.

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