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FRG1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16673b

Product Information

Application	WB, E
Primary Accession	Q14331
Other Accession	P97376, NP_004468.1
Reactivity	Human, Mouse
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36485
Calculated MW	29172
Antigen Region	230-256

Additional Information

Gene ID	2483
Other Names	Protein FRG1, FSHD region gene 1 protein, FRG1
Target/Specificity	This FRG1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 230-256 amino acids from the C-terminal region of human FRG1.
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 aliquots to prevent freeze-thaw cycles.
Precautions	FRG1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FRG1 (HGNC:3954)
Function	Binds to mRNA in a sequence-independent manner. May play a role in regulation of pre-mRNA splicing or in the assembly of rRNA into ribosomal subunits. May be involved in mRNA transport. May be involved in epigenetic

	regulation of muscle differentiation through regulation of activity of the histone-lysine N-methyltransferase KMT5B.
Cellular Location	Nucleus, Cajal body. Nucleus, nucleolus. Cytoplasm. Cytoplasm, myofibril, sarcomere, Z line. Note=Localization changes during myogenesis from mainly cytoplasmic in undifferentiated myoblasts, to strongly nucleolar in early myotubes and back to cytoplasmic 5 days post-differentiation (PubMed:20970242). Localized at the Z-line in the sarcomere of matured myotubes 8 days post-differentiation (PubMed:20970242).
Tissue Location	Expressed in adult muscle, lymphocytes, fetal brain, muscle, and placenta. Also expressed in the smooth muscle of arteries and veins, the sweat glands and the epidermis

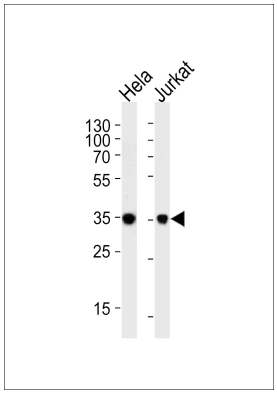
Background

This gene maps to a location 100 kb centromeric of the repeat units on chromosome 4q35 which are deleted in facioscapulohumeral muscular dystrophy (FSHD). It is evolutionarily conserved and has related sequences on multiple human chromosomes but DNA sequence analysis did not reveal any homology to known genes. In vivo studies demonstrate the encoded protein is localized to the nucleolus.

References

Hanel, M.L., et al. Dev. Dyn. 238(6):1502-1512(2009)
Bodega, B., et al. BMC Biol. 7, 41 (2009) :
Pirozhkova, I., et al. PLoS ONE 3 (10), E3389 (2008) :
Lamesch, P., et al. Genomics 89(3):307-315(2007)
Gabellini, D., et al. Nature 439(7079):973-977(2006)

Images



Western blot analysis of lysates from Hela, Jurkat cell line (from left to right), using FRG1 Antibody (C-term)(Cat. #AP16673b). AP16673b 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.