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ARHGEF3 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5820c

Product Information

Application	WB, IHC-P, E
Primary Accession	Q9NR81
Other Accession	Q91X46, Q9N0A8, Q5ZLX4, NP_062455.1
Reactivity	Human
Predicted	Chicken, Monkey, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB27451
Calculated MW	59783
Antigen Region	211-240

Additional Information

Gene ID	50650
Other Names	Rho guanine nucleotide exchange factor 3, Exchange factor found in platelets and leukemic and neuronal tissues, XPLN, ARHGEF3
Target/Specificity	This ARHGEF3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 211-240 amino acids from the Central region of human ARHGEF3.
Dilution	WB~~1:1000 IHC-P~~1:100~500 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	ARHGEF3 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ARHGEF3
Function	Acts as a guanine nucleotide exchange factor (GEF) for RhoA and RhoB GTPases.

Cellular Location	Cytoplasm.
Tissue Location	Widely expressed. Highest levels are found in adult brain and skeletal muscle. Lower levels are found in heart and kidney

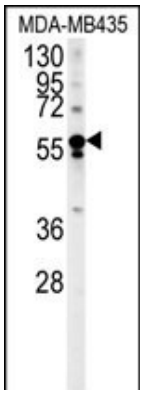
Background

Rho-like GTPases are involved in a variety of cellular processes, and they are activated by binding GTP and inactivated by conversion of GTP to GDP by their intrinsic GTPase activity. Guanine nucleotide exchange factors (GEFs) accelerate the GTPase activity of Rho GTPases by catalyzing their release of bound GDP. This gene encodes a guanine nucleotide exchange factor, which specifically activates two members of the Rho GTPase family: RHOA and RHOB, both of which have a role in bone cell biology. It has been identified that genetic variation in this gene plays a role in the determination of bone mineral density (BMD), indicating the implication of this gene in postmenopausal osteoporosis. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.

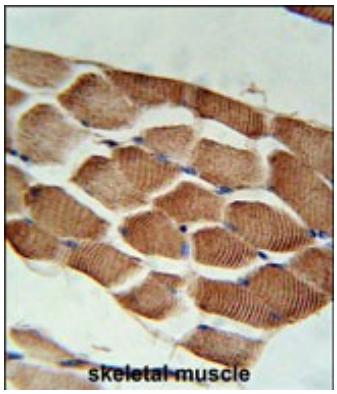
References

Arthur, W.T., et al. J. Biol. Chem. 277(45):42964-42972(2002)
Harrington, A.W., et al. J. Neurosci. 22(1):156-166(2002)
Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000)
Thiesen, S., et al. Biochem. Biophys. Res. Commun. 273(1):364-369(2000)

Images



ARHGEF3 Antibody (Center) (Cat. #AP5820c) western blot analysis in MDA-MB435 cell line lysates (35ug/lane).This demonstrates the ARHGEF3 antibody detected the ARHGEF3 protein (arrow).



ARHGEF3 Antibody (Center) (Cat. #AP5820c) immunohistochemistry analysis in formalin fixed and paraffin embedded human skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the ARHGEF3 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- The putative tumor activator ARHGEF3 promotes nasopharyngeal carcinoma cell pathogenesis by inhibiting cellular apoptosis.

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