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MyoGEF Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6922a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q3KR16
Reactivity	Human
Predicted	Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21288
Calculated MW	88960
Antigen Region	60-87

Additional Information

Gene ID	55200
Other Names	Pleckstrin homology domain-containing family G member 6, PH domain-containing family G member 6, Myosin-interacting guanine nucleotide exchange factor, MyoGEF, PLEKHG6
Target/Specificity	This MyoGEF antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 60-87 amino acids from the N-terminal region of human MyoGEF.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 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	MyoGEF Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLEKHG6
Function	Guanine nucleotide exchange factor activating the small GTPase RHOA,

	which, in turn, induces myosin filament formation. Also activates RHOG. Does not activate RAC1, or to a much lower extent than RHOA and RHOG. Part of a functional unit, involving PLEKHG6, MYH10 and RHOA, at the cleavage furrow to advance furrow ingression during cytokinesis. In epithelial cells, required for the formation of microvilli and membrane ruffles on the apical pole. Along with EZR, required for normal macropinocytosis.
Cellular Location	Cell projection, microvillus. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Cleavage furrow. Note=During mitosis, localizes to the spindle pole, central spindle and cleavage furrow (PubMed:16721066). In epithelial cells, recruited to the apical membrane by EZR where it participates in macropinocytosis (PubMed:17881735)
Tissue Location	Highest expression in the placenta. Low levels in small intestine, lung, liver, kidney, thymus and heart

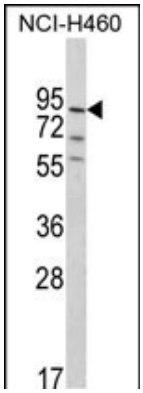
Background

Guanine nucleotide exchange factor activating the small GTPase RHOA, which, in turn, induces myosin filament formation. It Also activates RHOG and does not activate RAC1, or to a much lower extent than RHOA and RHOG. Its part of a functional unit, involving PLEKHG6, MYH10 and RHOA, at the cleavage furrow to advance furrow ingression during cytokinesis. In epithelial cells, It is required for the formation of microvilli and membrane ruffles on the apical pole. Along with EZR, it is required for normal macropinocytosis.

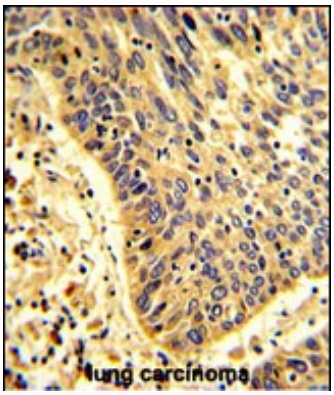
References

D'Angelo,R., et.al., Mol. Biol. Cell 18 (12), 4780-4793 (2007)

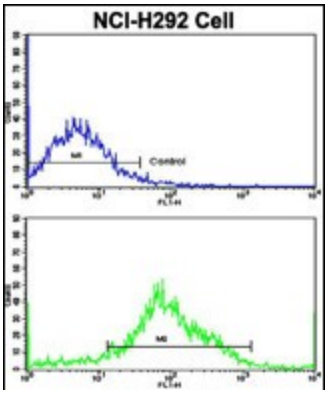
Images



Western blot analysis of MyoGEF Antibody (N-term) (Cat. #AP6922a) in NCI-H460 cell line lysates (35ug/lane). MyoGEF (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human lung carcinoma with MyoGEF Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of NCI-H292 cells using MyoGEF Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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