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# MyoGEF Rabbit pAb

Catalog # AP96282

## Product Information

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| **Application** | WB, IHC-P, IHC-F, IF, E |
| **Primary Accession** | Q3KR16 |
| **Other Accession** | Q3KR16 |
| **Predicted** | Rat, Human, Mouse, Rabbit, Dog, Horse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 88960 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human MyoGEF |
| **Epitope Specificity** | 451-550/790 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SUBCELLULAR LOCATION** | Cytoplasm. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Cleavage furrow. Note=During mitosis, localizes to the spindle pole, central spindle and cleavage furrow. In epithelial cells, recruited to the apical membrane by EZR. |
| **SIMILARITY** | Contains 1 DH (DBL-homology) domain. Contains 1 PH domain. |
| **SUBUNIT** | Interacts with MYH10. Interacts with ELMO1 and EZR (in an open conformation). Interacts with CSPP1. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | MyoGEF functions as a guanine nucleotide exchange factor activating the small GTPase RHOA, which, in turn, induces myosin filament formation. It activates RHOG but not activate RAC1, or to a much lower extent than RHOA and RHOG. Part of a functional unit, involving MyoGEF, 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. |

## Additional Information

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| **Gene ID** | 55200 |
| **Other Names** | PKHG6_HUMAN; PLEKHG6; PH domain-containing family G member 6; Myosin-interacting guanine nucleotide exchange factor (MyoGEF); ARHGEF46; MyoGEF; pleckstrin homology and RhoGEF domain containing G6; pleckstrin homology domain containing, family G (with RhoGef domain) member 6; myosin II interacting GEF |
| **Target/Specificity** | Highest expression in the placenta. Low levels in small intestine, lung, liver, kidney, thymus and heart. |

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| **Dilution** | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000 |
| **Storage** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |

## Protein Information

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| **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 |

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