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GEF-H1 Rabbit Polyclonal Antibody

Catalog #: EAB10770

Host/Isotype	Clonality	Applications	MW (kDa)	Reactivity
Rabbit IgG	Polyclonal	WB, IHC-P, IF, ELISA	111	Human, Mouse, Rat

Applications Dilutions

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

WB(Western Blotting)	1:500-2000
IHC-P(Immunohistochemistry-Paraffin)	1:50-300
IF(Immunofluorescence)	1:50-300
ELISA(Enzyme-linked Immunosorbent Assay)	1:5000-20000

Product Information

Conjugate	Unconjugate
Specificity	GEF-H1 Rabbit Polyclonal Antibody detects endogenous levels of GEF-H1 protein.
Purification	Affinity purification
Concentration	1mg/ml
Format	Liquid
Formulation	In PBS, pH 7.4, Containing 0.02% sodium azide, 0.5% BSA and 50% Glycerol
Shipping	Gel Pack
Storage	Store at -20°C least 1 year from the date of shipment. Avoid repeated freeze/thaw cycles. Aliquots may be stored at +4°C for 1-2 weeks
UniProt ID	Q92974
Entrez-Gene Id	9181

Product Descriotion

The Rho-related small GTPases are critical elements involved in regulation of signal transduction cascades from extracellular stimuli to cell nucleus and cytoskeleton. The Dbl-like guanine nucleotide exchange factors (GEF) have been implicated in direct activation of these GTPases. Here we have identified a new member of the Dbl family, GEF-H1, by screening a human HeLa cell cDNA library. GEF-H1 encodes a 100-kDa protein containing the conserved structural array of a Dbl homology domain in tandem with a pleckstrin homology domain and is most closely related to the Ifc oncogene, but additionally it contains a unique coiled-coil domain at the carboxyl terminus. Biochemical analysis reveals that GEF-H1 is capable of stimulating guanine nucleotide exchange of Rac and Rho but is inactive toward Cdc42, TC10, or Ras. Moreover, GEF-H1 binds to Rac and Rho proteins in both the GDP- and guanosine 5'-3-O-(thio)triphosphate-bound states without detectable affinity for Cdc42 or Ras. Immunofluorescence reveals that GEF-H1 colocalizes with microtubules through the carboxyl-terminal coiled-coil domain. Overexpression of GEF-H1 in COS-7 cells results in induction of membrane ruffles. These results suggest that GEF-H1 may have a direct role in activation of Rac and/or Rho and in bringing the activated GTPase to specific target sites such as microtubules.