

Product datasheet for TP511388

Arhgef2 (NM_008487) Mouse Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Mouse rho/rac guanine nucleotide exchange factor (GEF) 2 (Arhgef2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug
Species:	Mouse
Expression Host:	HEK293T
Expression cDNA Clone or AA Sequence:	>MR211388 protein sequence Red =Cloning site Green =Tags(s)

MSRIESLTRARIDRSKEQATKTREKEKMKEAKDARYTNGHLFTTISVSGMTMCYACNKSITAKEALICPT
CNVTIHNRCCKDTLANCTKVQKQQAALLRNNTALQSVSLRSKTTTTRERPTSAIYPSDSFRQSLGSRRG
LSSLAKSVSTTNIAGHFNDESPLGLRQILSQSTDSLNMNRNRTLSVESLIDEGVEVFYNELMSDFEMDE
KDFEADSWSLAVDSSFLQQHKKEVMKKQDVIYELIQTELHHVRTLKIMTRLFRTGMLEELQMEPEVVQGL
FPCVDELSDIHRFLNQLLERRRQALCPGSTRNFVIHRLGDLLISQFSGSNAEQMRKTYSEFCSRHTKAL
KLYKELYARDKRFQQFIRKMTSAVLKRHGVQECILLVTQRITKYPVLINRILQNSHGVEEYQDLASAL
GLVKELLSNVDQDVHELEKEARLQEIYNRMDPRAQTPVPGKPGFRDELLRRKLIHEGCLLWKTATGRFK
DVLLLLMTDVLVFLQEKDQKIYFTSLDKPSVSVSLQNLIVRDIANQAKGMFLISSGPPEMYEVHAASRDDR
TTWIRVIQQSVRLCPSREDFPLIETEDKAYLRRIKTKLQKNQALVELLQKNVELFAEMVHFQALKAGFV
GMPPPALPRGLFRLESFESLRGERLLKDALREVEGLKDLLGPCVDLPTTSREPALPLSDSGSCPGVTA
NGEARTFNGSIELCRADSDSSQKDRNGNQLRSPQEEVLQPLINLYGLLHGLQAVVVQQRLEMEALFPEGP
ERWEKLSRANSRDGEAGRAAVASVTPEKQATELALLQRQHTLLQEELRRCQLGEERATEAGSLEARLRE
SEQARALLEREAEIIRQLAALGQNEPLPAEAPWARRPLDPRRRSLPAGDALYLSFNPPQPSRGHDLRLDL
PVTVRSLSLHRPFDDREAQELGSPEDRLQDSSDPDTGSEEEVSSRLSPPHSPRDFTRMQDIPEETESRDGEP
TASES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-MYC/DDK
Predicted MW:	111.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol



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Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_032513
Locus ID:	16800
UniProt ID:	Q60875
RefSeq Size:	4300
Cytogenetics:	3 F1
RefSeq ORF:	2958
Synonyms:	AA408978; GEF; GEF-H1; GEFH1; Lbcl1; Lfc; LFP40; mKIAA0651; P40
Summary:	Activates Rho-GTPases by promoting the exchange of GDP for GTP. May be involved in epithelial barrier permeability, cell motility and polarization, dendritic spine morphology, antigen presentation, leukemic cell differentiation, cell cycle regulation, innate immune response, and cancer. Binds Rac-GTPases, but does not seem to promote nucleotide exchange activity toward Rac-GTPases. May stimulate instead the cortical activity of Rac. Inactive toward CDC42, TC10, or Ras-GTPases. Forms an intracellular sensing system along with NOD1 for the detection of microbial effectors during cell invasion by pathogens. Involved in innate immune signaling transduction pathway promoting cytokine IL6/interleukin-6 and TNF-alpha secretion in macrophage upon stimulation by bacterial peptidoglycans; acts as a signaling intermediate between NOD2 receptor and RIPK2 kinase. Contributes to the tyrosine phosphorylation of RIPK2 through Src tyrosine kinase leading to NF-kappaB activation by NOD2. Overexpression activates Rho-, but not Rac-GTPases, and increases paracellular permeability (By similarity). Involved in neuronal progenitor cell division and differentiation (PubMed:28453519). Involved in the migration of precerebellar neurons (PubMed:28453519). [UniProtKB/Swiss-Prot Function]