

## Product datasheet for TP522994

### Rock2 (NM\_009072) Mouse Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Purified recombinant protein of Mouse Rho-associated coiled-coil containing protein kinase 2 (Rock2), with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

**Species:** Mouse

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >MR222994 representing NM\_009072  
Red=Cloning site Green=Tags(s)

MSRPPPTGKMPGAPETAPGDGAGAGRQRKLEALIRDPRSPINVESLLDGLNSLVLDLDFPALRKNKNIDN  
FLNRYEKIVKKIRGLQKAEDYDVVKVIGRGAFGEVQLVRHKASQKVYAMKLLSKFEMIKRSDSAFFWEE  
RDIMAFANSPWVWQLFCFAQDDRYLYMVMEMYMPGGDLVNLMSNYDVPEKWAKFYTAEVVLAIDAIHSMGL  
IHRDVKPDNMLLDKHHGLKLADFGTCMKMDETGMVHCDAVGTDPDYSPEVLKSQGGDGYGREGDWWSV  
GVFLFEMLVGDTPFYADSLVGTYSKIMDHKNSLCFPEDETEISKHAKNLICAFITDREVRLGRNGVVEIKQ  
HPFFKNDQWNWDNIRETAAAPVPELSSDIDSSNFDDIEDDKGDVETFPKPAFVGNQLPFIGFTYFRENL  
LLSDSPPCRENDAIQTRKSEESQEIQKLYALEEHLSSVQAKEELEQKCKSINTRLEKTAKELEEEITL  
RKSVESTLRQLEREKALLQHKNAEYQRKADHEADKRNLENDVNSLKDQLEDLKKRNQSSQISTEKVNQL  
QKQLDEANALLRTESDTAARLRKTAESSKQIQQLSNNRDLQDKNCLLETAKLKEKEFINLQSALESE  
RRDRTHGSEIINDLQGRISGLEEDLKTGKALLAKVELEKRLQEQKLTDLKEKSNMEIDMTYQLKVIQSS  
LEQEEAEHKTTKARLADKNKIYESIEEAKSEAMKEMEKKLLEERSLKQKVENLLEAEKRCSILDCLKQ  
SQQKLNELLKQKDVNLNEDVRNLTLEKIEQETQKRCLMQNDLKMQTQQVNTLKMSEKQIKQENHLMEMKMN  
LEKQNTLRKERQDADGQMKELQDQLEAEQYFSTLYKTQVRELKEENEEKTKLCKELQKKQDLQDERDS  
LAAQLEITLTKADSEQLARSIAEEQYSDLEKEKIMKELEIKEMMARHKQELTEKDTTASLEETNRTLTS  
DVANLANEKEELNNKLKDSQEQLSKLKDEEMSAAAIAQFEKQLLNERTLKTQAVNKLAEIMNRKEPVKR  
GSDTDVRRKEKENRKLHMEKSEREKLTTQMIKYQKELNEMQAQIAEESQIRIELQMTLDSKSDIEQLR  
SQLQALHIGMDSSSIGSGPDAEPDDGFPESRLEGWLSLVRNNTKKFGWVKYVIVSSKILFYDSEQD  
KEQSNPYMVLIDIDKLFHVRPVTQTDVYRADAKEIPRIFQILYANEGESKKEPEFPVPEVGEKSNYICHKG  
HEFIPTLYHFPTNCEACMKPLWHMFKPPPALCRRCHIKCHKDHMDKKEEIIAPCKVYDISSAKNLLLL  
ANSTEEQQKWWSRLVKKIPKPPAPDPFARSSPRTSMKIQQNQSIRRRPSRQLAPNKPS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-MYC/DDK

**Predicted MW:** 161.1 kDa



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<b>Concentration:</b>	>0.05 µg/µL as determined by microplate BCA method
<b>Purity:</b>	> 80% as determined by SDS-PAGE and Coomassie blue staining
<b>Buffer:</b>	25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol
<b>Note:</b>	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
<b>Storage:</b>	Store at -80°C after receiving vials.
<b>Stability:</b>	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
<b>RefSeq:</b>	<a href="#">NP_033098</a>
<b>Locus ID:</b>	19878
<b>UniProt ID:</b>	<a href="#">P70336</a> , <a href="#">F8VPK5</a> , <a href="#">Q3TR46</a>
<b>RefSeq Size:</b>	8012
<b>Cytogenetics:</b>	12 A1.1
<b>RefSeq ORF:</b>	4164
<b>Synonyms:</b>	B230113H15Rik; mKIAA0619; Rho-kinase; Rock-II; Rock2m; ROKalpha
<b>Summary:</b>	<p>Protein kinase which is a key regulator of actin cytoskeleton and cell polarity. Involved in regulation of smooth muscle contraction, actin cytoskeleton organization, stress fiber and focal adhesion formation, neurite retraction, cell adhesion and motility via phosphorylation of ADD1, BRCA2, CNN1, EZR, DPYSL2, EP300, MSN, MYL9/MLC2, NPM1, RDX, PPP1R12A and VIM. Phosphorylates SORL1 and IRF4. Acts as a negative regulator of VEGF-induced angiogenic endothelial cell activation. Positively regulates the activation of p42/MAPK1-p44/MAPK3 and of p90RSK/RPS6KA1 during myogenic differentiation. Plays an important role in the timely initiation of centrosome duplication. Inhibits keratinocyte terminal differentiation. May regulate closure of the eyelids and ventral body wall through organization of actomyosin bundles. Plays a critical role in the regulation of spine and synaptic properties in the hippocampus. Plays a role in placental homeostasis during the perinatal period. Plays an important role in generating the circadian rhythm of the aortic myofilament Ca(2+) sensitivity and vascular contractility by modulating the myosin light chain phosphorylation.[UniProtKB/Swiss-Prot Function]</p>