

## Product datasheet for **MR208709**

### **Rgs14 (NM\_016758) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Rgs14 (NM_016758) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rgs14
Synonyms:	RPIP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR208709 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCCAGGAAGCCCAAGCACTTGGGTGTCCCAACGGGCGCATGTTTCTGGCTGTCTCAGATGGAGAAC  
 TGACCAGCACTGCAGTTCCAGGCCAGGGTGGGGCAGAGGCAGCTCTCTCAGCATCCACAGCCTCCC  
 TAGTGGCCCCAGCAGCCCTTCTCCACCGAGGAGCAGCCTGTGGCCAGCTGGGCCAGTCTTTGAGCGG  
 CTGCTGCAAGACCCACGGGGTCTGGCTTACTTCACTGAGTTCTGAAGAAGGAATTCAGCGCAGAGAACG  
 TAACCTTCTGGAAAGCCTGCGAACGTTTCCAGCAGATCCAGCCAGCGACACCAAGCAGCTAGCTCAGGA  
 GGCCACAACATCTACCACGAGTTCTATCCAGCCAGGCGCTGAGCCAGTGAACATCGACCGACAGGCC  
 TGGCTTAGTGAGGAGGTGCTGGCCAGCCCCGGCCAGATATGTTCCGAGCACAGCAGCTTCAGATCTTCA  
 ATTTGATGAAGTTCGACAGCTATGCGCGCTTCGTCAAATCCCCGCTGTACCAAGAGTGCCTGCTGGCGGA  
 GGCCGAGGAGCGCCCCCTGCGGGAACCTGGCTCCTCACACCTCGGAGCCCGGACACAGCGAGGAAGAAG  
 CCAAAGCTGAAGCCTGGGAAGTCACTGCCGCTGGGCGTGAAGAGTTGGGGCAGCTGCCACTCGCTGAGG  
 GCCCTTGTGGCCGCCCTCTCCGCAAGTCTTTCGTAGAGAGATGACAGGTGGAGCCATGAATTCGGCCCT  
 GCGACGAGAGTCTCAAGGGTCCCTGAATTTCTTCTGCCAGTCTGGACCTGGGTTTCTTGCCTTTGTGAGC  
 AGCAAACTGAGAGTCACCGGAAGAGCCTTGAAGTGGAGAGAGTGGAGAGCGAGAGTGGCCCGGGGAAGT  
 ATTGCTGCGTGTATCTACCTGACGGCACGGCTTCTTGGCCCTGGCTCGACTGGCTCACCATCCGAGA  
 CATGCTGGCAGGCATCTGTGAGAAGAGAGGCCTCTCTGCTGACATTAAGGTCTACCTGGTGGCAAT  
 GAACAGAAGGCCCTGGTCTGGATCAGGATTGCACCGTGTGGCAGACCAGGAAGTGGACTGAAAAACA  
 GGATCACCTTCCAGCTGGAGTTGGTGGCTGGAGCGAGTGGTCCGGATCTCAGCTAAGCCACCAAGCG  
 TCTGCAAGAGGCCCTGCAGCCCATCTGGCTAAGCATGGCTGAGCCTGGACCAGGTGGTACTGCACAGG  
 CCAGGAGAGAAGCAGCCATGGATTTGGAGAATCCAGTGAAGTCAAGTGGCCCTCACAGACTGGTTTTGG  
 ACACTCTCCGGATGCAAAGATGAGTGAAGCCAGAAGCATATCCCCCTGCCGAGTCAAGGATGCCTCCC  
 AAGAACCAGACCAAGGACAGTACCTTCCCCATCGTCTCCAGTTTGGTGGTGAAGATGCCAGTAGT  
 TCTACTGGGAACCGCAGACCTGTGACATTGAAGGCTGGTGGAGCTGCTGAATCGGGTGCAGAGCAGCG  
 GGGCCACGATCAGAGAGGACTTCTCGCAAAGAGGACCTGGTCTTCCAGAATTTCTGCAGCTTCTTCC  
 CCAAAGACCAGGCTCTCGGGAGGCTCCACCA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208709 protein sequence  
 Red=Cloning site Green=Tags(s)

MPGKPKHLGVPNGRMVLAVSDGELTSTAGSQAQGEGRGSSLIIHSLPSGPSSPFSTEEQPVASWAQSFER  
 LLQDPRGLAYFTEFLKKEFSAENVTFWKACERFQQIPASDTKQLAQEAHNIYHEFLSSQALSPVNIQRQA  
 WLSEEVLAQPRPDMFRAQQLQIFNLMKFDSYARFVKSPLYQECLLAEAGRPLREPGSSHLGSPDTRKK  
 PKLKPGKSLPLGVEELGQLPLAEGPCGRPLRKSFRREMTGGAMNSALRRESQGSLSNSASLDLGLAFVVS  
 SKSESHRSLSGSESESRPGKYCCVYLPDGTASLALARPGLTIRDMLAGICEKRLSLPDIKVYLVGN  
 EQKALVLDQDCTVLADQEVRLNRIITFQLELVGLERVVIRISAKPTKRLQEALQPIAKHGLSLDQVVLHR  
 PGEKQPMLENPVSSVASQTLVLDTPPAKMSEARSISPCRSQGCLPRTQTKDHLPPSSSLLVEDASS  
 STGNRQTCIEGLVELLNVRVQSSGAHDQRGLLRKEDLVLPEFLQLPSQRPGSREAPP

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

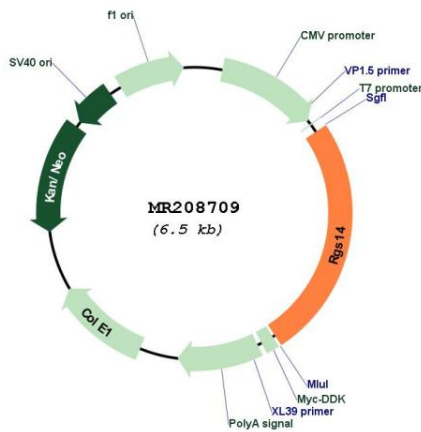


**Cytogenetics:** 13 29.8 cM

**MW:** 59.8 kDa

**Gene Summary:** Regulates G protein-coupled receptor signaling cascades. Inhibits signal transduction by increasing the GTPase activity of G protein alpha subunits, thereby driving them into their inactive GDP-bound form. Besides, modulates signal transduction via G protein alpha subunits by functioning as a GDP-dissociation inhibitor (GDI). Has GDI activity on G(i) alpha subunits GNAI1 and GNAI3, but not on GNAI2 and G(o) alpha subunit GNAO1. Has GAP activity on GNAI0, GNAI2 and GNAI3. May act as a scaffold integrating G protein and Ras/Raf MAPkinase signaling pathways. Inhibits platelet-derived growth factor (PDGF)-stimulated ERK1/ERK2 phosphorylation; a process depending on its interaction with HRAS and that is reversed by G(i) alpha subunit GNAI1. Acts as a positive modulator of microtubule polymerisation and spindle organization through a G(i)-alpha-dependent mechanism. Plays a role in cell division; required for completion of the first mitotic division of the embryo. Involved in visual memory processing capacity; when overexpressed in the V2 secondary visual cortex area. Involved in hippocampal-based learning and memory; acts as a suppressor of synaptic plasticity in CA2 neurons. Required for the nerve growth factor (NGF)-mediated neurite outgrowth. Involved in stress resistance.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR208709