

Product datasheet for **RC217608**

Germinal Center Kinase (MAP4K2) (NM_004579) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Germinal Center Kinase (MAP4K2) (NM_004579) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Germinal Center Kinase
Synonyms:	BL44; GCK; RAB8IP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC217608 representing NM_004579
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

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CCCAATGTGGTGGCTACATTGGCAGCTACCTCAGGAATGACCGCTTGTGGATCTGCATGGAGTTCTGCG
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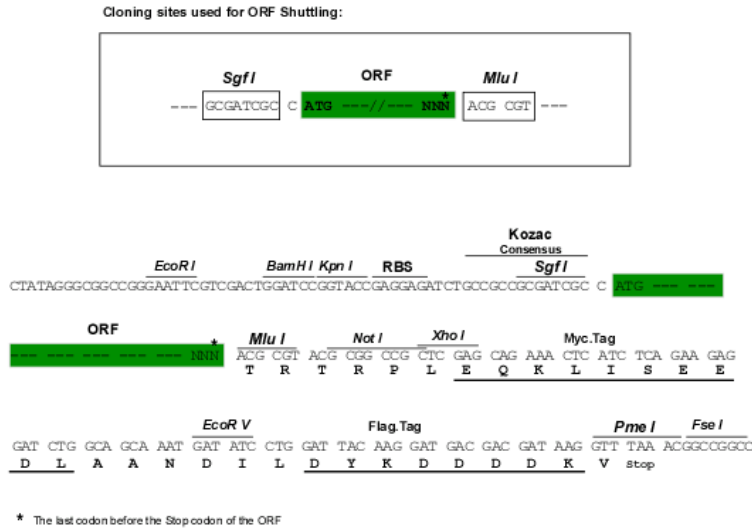
Protein Sequence: >RC217608 representing NM_004579
Red=Cloning site Green=Tags(s)

MALLRDVSLQDPRDRFELLQRVGAGTYGDVYKARDTVTSELAAVKIVKLDPGDDISSLQQEITILRECRH
PNVVAYIGSYLRNDRLWICMEFCGGSLQEIYHATGPLEERQIAYVCREALKGLHHLHSQGIHRDIKGA
NLLLTLQGDVKLADFGVSGELTASVAKRRSFIGTPYWMAPEVAVERKGGYNELCDVWALGITAIELGEL
QPPLFHLHPMRALMLMSKSSFQPPKLRDKTRWTQNFHFLKLALTKNPKKRPTAEKLLQHPFTTQQLPRA
LLTQLLDKASDPHLGTPSPEDCELETYDMFPDTIHSRGQHGAERTPSEIQFHQVKFGAPRRKETDPLNE
PWEEEWTLGKEELSGSLLQSVQEALERSLTIRSAEFQELDSPDDTMGTIKRAPFLGPLTPDPPAEEP
LSSPPGLTPPPSPGPNSSPLLPTAWATMKQREDPERSSCHGLPPTPKVHMGACFSKVFNGCPLRIHAAVT
WIHPVTRDQFLVVGAEEGIYTLNLHELHEDTLEKLI SHRCSWLVCVNNVLLSLSGKSTHIWAHDLPLGFE
QRRLQQVPLSIPTNRLTQRIIPRRFALSTKIPDTKGCLQCRVVRNPYTGATFLLAALPTSLLLLQWYEP
LQKFLLLKNFSSPLPSPAGMLEPLVLDGKELPQVCVGAEGPEGPGCRVLFHVLPLEAGLTPDILIPPEGI
PGSAQQVIQVDRDITLVSFERCVRIVNMQGEPTATLAPELTFDFPIETVCLQDSVLAFWSHGMQGRSLD
TNEVTQEITDETRIFRVLGAHRDIILESIPTDNPEAHSNLYILTGHQSTY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg3920_f01.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:


ACCN: NM_004579

ORF Size: 2460 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_004579.5](#)

RefSeq Size: 2964 bp

RefSeq ORF: 2463 bp

Locus ID: 5871

UniProt ID: [Q12851](#)

Cytogenetics: 11q13.1

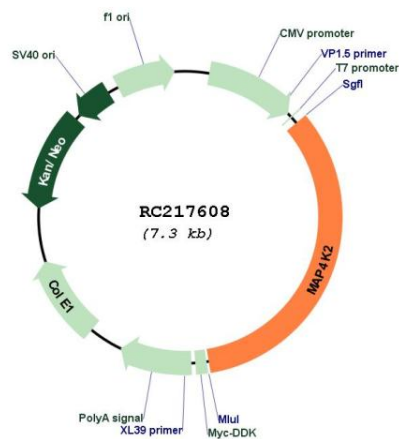
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: MAPK signaling pathway

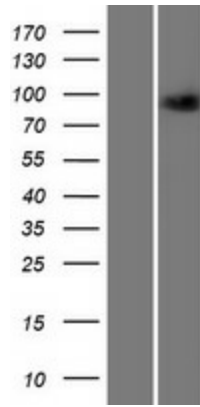
MW: 91.4 kDa

Gene Summary: The protein encoded by this gene is a member of the serine/threonine protein kinase family. Although this kinase is found in many tissues, its expression in lymphoid follicles is restricted to the cells of germinal centre, where it may participate in B-cell differentiation. This kinase can be activated by TNF-alpha, and has been shown to specifically activate MAP kinases. This kinase is also found to interact with TNF receptor-associated factor 2 (TRAF2), which is involved in the activation of MAP3K1/MEKK1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]

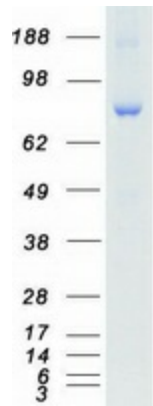
Product images:



Circular map for RC217608



Western blot validation of overexpression lysate (Cat# [LY417889]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC217608 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MAP4K2 protein (Cat# [TP317608]). The protein was produced from HEK293T cells transfected with MAP4K2 cDNA clone (Cat# RC217608) using MegaTran 2.0 (Cat# [TT210002]).