

Product datasheet for **MR222324**

Ksr2 (NM_001114545) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ksr2 (NM_001114545) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ksr2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR222324 representing NM_001114545
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATGAGGAAAACATGACGAAAAGCGAAGAGCAGCAACCTCTGAGTTGCAAAAAGCCTTGCAGCAGT
 GCGAGTTGGTTTCAGAACATGATCGACCTGAGCATCTCCAATCTGGAAGGGCTTAGGACCAAGTGTGACG
 TTCCAACGACCTCAGCGAGAAGGAGATCAGGACCTGGAGAGCAAGCTGGTGAAGTACTTTCAGCCGACAG
 CTGTCTGCAAGAAGAAGGTGGCTCTGCAGGAACGCAATGCTGAACTGGACGGCTTCCCCAGCTCCGCC
 ACTGGTTCCGGATCGTGGATGTCCGAAAGGAAGTCTGGAGGAGATCTCCCTGACCAGCTGAGCTTGGAA
 GGACCTCTGGAGATGACCGACGAGCAGGTGTGTGAGACCGTGGAGAAGTATGGAGCCAACCAGGAAGAG
 TGCGCCCCGGTCAACGCCTCACTCTCTGCCTCAGGAATGTGCACAAATCAGGAGGAATCTCTCCAAC
 AAGATTGGATCATCCAGTGGCCACCACGGAGCCAGGGCAGGAGCAACCTGTGTGCCCCCGGAGCC
 CAGCCCCGTGGATCCGAACCCACCTCTCCAGAGCCCCAGGGTCCAGACCAAGTGTCCCCAGCACTTCTGT
 CCTACCAGCCCTACGCTGGGACCCCTGTGTACACCAAGTGGACAGACTCACTGTAGATGCCTACCCGA
 ACTTGTGCCCGCCGCCGCCACCCCTGGAATCAGGCCACCGCTCTCTGCCCCCGTCTCCCCGGCAGCGGCA
 CGTAGTCCGACCCACCTCGCACCCCAATATTGTACCACCGTACCCACCTGGCACGCCACCCATG
 AGGAGAAAAACAAGCTGAAGCCTCCCGGGACGCCACCCCTCTCTCGGAAGCTCATCCATCTGATCC
 CTGGCTTACAGCGCTGCACAGGAGCAATCCCACGAGTTCAGCTCGGGAACCGTGTAGACGAGGCCAA
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 AACATCCCCGCCAGCAACGCTCTCCGCTCTGTCCGAGCGCTCCTTGGGTCTCTTTGTGGCCACG
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 TCGCTGGTCAACCACAGATCCACAGCAGAGACTTGGCAATTCATCAAGCACAGGTTTTCCACCAAGTAC
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 TAAAGTGCACAATAAATGCACCAAGAAGCCCGCCCTGTACCTCCTGATTATCCACCGAGGAGACTC
 TCTCTGTGTTTTACCCTACGGACCCAGCAAGGTTAGTGCAACGGAGTCGGTGCCTGTGACATCAAC
 AACCCGGTCCGGAAGCCTGCCCGATTTAGATCTCCACATCAGTCAGACTCTCCCCAAAACCAACAAAA
 TCAACAAGGACCACATCCCTGTCCCTTACCAGCCAGACTCCAGCAGCAATCCCTCTCCACGACGTCTC
 CAGCCCTCTCACCGGCACCCCTCCCTCCAGCGCCACGCCCTTCTCCCTGCACCCCTCCCCG
 CAGTGCCCGAGACAGAAAAGAACTTCAACCTGCCAGCTTCCACTACTACAAATACAAGCAACAGTTCA
 TCTTCCAGATGTGGTGCCTGTACCAGAGACCCACCCGGGCACCCCAAGTCATCCTGCATCCTGTAC
 CTCAAATACAATCTTGAAGGAAACCCATTACTTCAAATGAAGTGAACCAACCTCCGAGAACGAAGAG
 AGCCACAATGAAGCAGAGGAGTCCGAGGACGAGTTTGAAGAGATGAACCTATCCCTCCTCAGCCCGGA
 GCTTCCACGCAAGCCAGCCAGACCAGCATCTTCTTCCAGGAGTGGGACATCCCGTTTGAACAGCTAGA
 GATTGGCAGCTCATCGGAAAGGTCGCTTCCGGCAGGTTTACCACGGACGCTGGCACGGCGAGGTGGCC
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 ATAAGGACCTCAAATCGAAGAAGCTTCTATGACAACGGCAAAGTGGTATCACAGACTTTGGGCTCTT
 CAGCATTTCCGGGTGCTGCAGGCTGGCCGGGACGACAAACTGCGGATCCAGAACGGCTGGCTGTGT
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 ACCAGCAGAGGCAATCATTTGGCAGATGGGCACGGGAATGAAGCCCAACCTCAGCCAGATTGGCATGGGA
 AAAGAAATCTCGACATACTGCTCTTCTGCTGGGCTTTCGAGCAGGAAGAGCGGCCACCTTTACCAAGC
 TCATGGACATGCTAGAGAACTGCCAAAGCGAAACCGCCGCTGTGCACCCCGACATTCTGGAAGTC
 TGCAGAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222324 representing NM_001114545
 Red=Cloning site Green=Tags(s)

MDEENMTKSEEQQPLSLQKALQQCELVQNMIDLSISNLEGLRTKCAASNDLTQKEIRTLESKLVKYFSRQ
 LSCKKKVALQERNAELDGFPQLRHWFRIVDVRKEVLEEISPDQLSLEDLLEMTDEQVCETVEKYGANQEE
 CARLNASLSCLRNVHKSGGNLSKQDWIIQWPTTEPGQESNPVCPPEPSPWIRTHLSQSPRVQTKCPQHFC
 PTSPTPGTPVYTQVDRLTVDAYPNLCP PPPPLESGHRS LPPSPRQRHVVRTPPRTPNIVTTVTPPGTPPM
 RRKNKLKPPGTPPPSSRKL IHLIPGFTALHRSKSHEFQLGNRVDEANTPKAKKSKPLNLKIHSVGVGSC
 NIPAAQQRSPLLSERSLRSFFVGHGPFLLPSTPPVHTEANFSANTLSVPRWSPQIPRRDLGNSIKHRFSTKY
 WMSQTCTVCGKGMFLGLKCKNCKLKCHNKCTKEAPPCHLLIIHRGDSLCCFYPTDPARLVRTESVPCDIN
 NPVRKPARYSDLHISQTLPKTNKINKDHIPVPYQPDSSSNPSSTTSSTPSSPAPPLPPSATPPSPLHPS
 QCPRQKKNFNL PASHYYKYKQFIFPDVVPVETPTRAPQVILHPVTSNTILEGNPLLQIEVEPTSENEE
 SHNEAEESEDEFEEMNLSLLSARSFPRKASQTSIFLQEWDPFEQLEIGELIGKGRFGQVYHGRWHGEVA
 IRLIDIERDNEDQLKAFKREVMAYRQTRHENNVLFMGACMSPPHLAIITSLCKGRTLYSVVRDAKIVLDV
 NKTRQIAQEIVKGMGYLHAKGILHKDLKSKNVFYDNGKVITDFGLFSISGVLQAGRDDKLRIQNGWLC
 HLAPEIIRQLSPDTEEDKLPFSKHSDFALGTIWYELHAREWPFKTQPAEAIWQMGTMKPNLSQIGMG
 KEISDILLFCWAFEQEERTFTKLMDMLEKLPKRNRRLSHPGHFWKSAEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9100_b05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



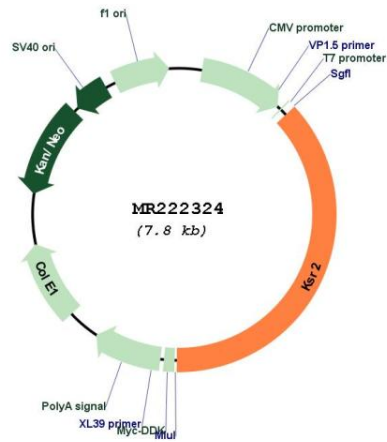
* The last codon before the Stop codon of the ORF

ACCN: NM_001114545

ORF Size: 2880 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:	<ol style="list-style-type: none">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_001114545.2 , NP_001108017.2
RefSeq Size:	6143 bp
RefSeq ORF:	2883 bp
Locus ID:	333050
Cytogenetics:	5 F
MW:	108.7 kDa
Gene Summary:	Location-regulated scaffold connecting MEK to RAF. Has very low protein kinase activity and can phosphorylate MAP2K1 at several Ser and Thr residues with very low efficiency (in vitro). Interaction with BRAF enhances KSR2-mediated phosphorylation of MAP2K1 (in vitro). Blocks MAP3K8 kinase activity and MAP3K8-mediated signaling. Acts as a negative regulator of MAP3K3-mediated activation of ERK, JNK and NF-kappa-B pathways, inhibiting MAP3K3-mediated interleukin-8 production (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222324