

## Product datasheet for **MG222324**

### **Ksr2 (NM\_001114545) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Ksr2 (NM_001114545) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ksr2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG222324 representing NM\_001114545  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGATGAGGAAAACATGACGAAAAGCGAAGAGCAGCAACCTCTGAGTTGCAAAAAGCCTTGCAGCAGT  
 GCGAGTTGGTTTCAGAACATGATCGACCTGAGCATCTCCAATCTGGAAGGGCTTAGGACCAAGTGTGACG  
 TTCCAACGACCTCAGCGAGAAGGAGATCAGGACCTGGAGAGCAAGCTGGTGAAGTACTTTCAGCCGACAG  
 CTGTCTGCAAGAAGAAGGTGGCTCTGCAGGAACGCAATGCTGAACTGGACGGCTTCCCCAGCTCCGCC  
 ACTGGTTCCGGATCGTGGATGTCCGAAAGGAAGTCTGGAGGAGATCTCCCTGACCAGCTGAGCTTGGAA  
 GGACCTCTGGAGATGACCGACGAGCAGGTGTGTGAGACCGTGGAGAAGTATGGAGCCAACCAGGAAGAG  
 TGCGCCCCGGTCAACGCCTCACTCTCTGCCTCAGGAATGTGCACAAATCAGGAGGGAATCTCTCAAAC  
 AAGATTGGATCATCCAGTGGCCACCACGGAGCCAGGGCAGGAGCAACCTGTGTGCCCCCGGAGCC  
 CAGCCCCGTGGATCCGAACCCACCTCTCCAGAGCCCCAGGGTCCAGACCAAGTGTCCCCAGCACTTCTGT  
 CCTACCAGCCCTACGCCTGGGACCCCTGTGTACACCCAAGTGGACAGACTCACTGTAGATGCCTACCCTGA  
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 CGTAGTCCGACCCACCTCGCACCCCAATATTGTACCACCGTACCCACCTGGCACGCCACCCATG  
 AGGAGAAAAACAAGCTGAAGCCTCCCGGGACGCCACCCCTCTCTCGGAAGCTCATCCATCTGATCC  
 CTGGCTTACAGCGCTGCACAGGAGCAATCCCACGAGTTCAGCTCGGGAACCGTGTAGACGAGGCCAA  
 CACACCCAAAGCAAGAAGAAGAGCAAAACCTTGAACCTCAAGATCCACAGCGCGTGGGACGCTGCGAG  
 AACATCCCCGCCAGCAACGCTCTCCGCTCTGTCCGAGCGCTCTTGGGCTCTTCTTGTGGGCCACG  
 GGCCCTTCTGCCCTCCACCCACCTGTCCACACTGAAGCCAATTTCTCTGCAAAACACACTCTGTATCC  
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 TAAAGTGCACAATAAATGCACCAAGAAGCCCGCCCTGTACCTCCTGATTATCCACCGAGGAGACTC  
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 CACGCCCTCTCACCGGCACCCCTCCCTCCAGCGCCACGCCCTCTCCCTGCACCCCTCCCCG  
 CAGTGGCCGAGACAGAAAAGAACTTCAACCTGCCAGTCTCCACTACTACAAATACAAGCAACAGTTCA  
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 AAAGAAATCTCGACATACTGCTCTTCTGCTGGGCTTTCGAGCAGGAAGAGCGGCCACCTTTACCAAGC  
 TCATGGACATGCTAGAGAACTGCCAAAGCGAAACCGCCGCTGTGCACCCCGACATTCTGGAAGTC  
 TGCAGAGCTG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG222324 representing NM\_001114545  
 Red=Cloning site Green=Tags(s)

MDEENMTKSEEQQPLSLQKALQQCELVQNMIDLSISNLEGLRTKCAASNDLTQKEIRTLESKLVKYFSRQ  
 LSCKKKVALQERNAELDGFPLRHWFRIVDVRKEVLEEISPDQLSLEDLLEMTDEQVCETVEKYGANQEE  
 CARLNASLSCLRNVHKSGGNLSKQDWIIQWPTTEPGQESNPVCPPEPSPWIRTHLSQSPRVQTKCPQHFC  
 PTSPTPGTPVYTQVDRLTVDAYPNLCP PPPPLESGHRSLLPPSPRQRHVVRTPPRTPNIVTTVTPGTPPM  
 RRKNKLKPPGTPPPSSRKL IHLIPGFTALHRSKSHEFQLGNRVDEANTPKAKKSKPLNLKIHSGVGSCE  
 NIPAAQQRSPLLSERSLRSFFVGHGPFLLPSTPPVHTEANFSANTLSVPRWSPQIPRRDLGNSIKHRFSTKY  
 WMSQTCTVCGKGMFLGKCKNCKLKCHNKCTKEAPPCHLLIIHRGDSLCCFYPTDPARLVRTESVPCDIN  
 NPVRKPARYSDLHISQTLPKTNKINKDHIPVPYQPDSSSNPSSTTSSTPSSPAPPLPPSATPPSPLHSP  
 QCPRQKKNFNL PASHYYKYKQQFIFPDVVPVETPTRAPQVILHPVTSNTILEGNPLLQIEVEPTSENEE  
 SHNEAESEDEFEEMNLSLLSARSFPRKASQTSIFLQEWDPFEQLEIGELIGKGRFGQVYHGRWHGEVA  
 IRLIDIERDNEDQLKAFKREVMAYRQTRHENVLFMGACMSPPHLAIITSLCKGRTLYSVVRDAKIVLDV  
 NKTRQIAQEIIVKGMGYLHAKGILHKDLKSKNVFYDNGKVVITDFGLFSISGVLQAGRRDDKLRIQNGWLC  
 HLAPEIIRQLSPDTEEDKLPFSKHSDFALGTIWEYELHAREWPFKTQPAEAIWQMGTMKPNLSQIGMG  
 KEISDILLFCWAFEQEERPTFTKLMLEKLPKRNRRLSHPGHFWKS AEL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

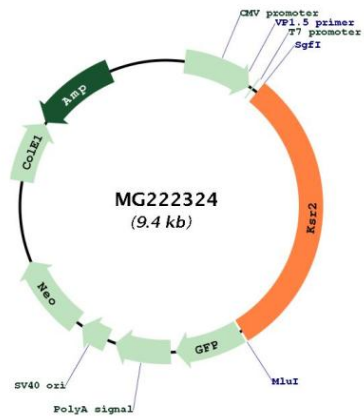
Cloning Scheme:



ACCN: NM\_001114545

<b>ORF Size:</b>	2880 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001114545.2</a> , <a href="#">NP_001108017.2</a>
<b>RefSeq Size:</b>	2856 bp
<b>RefSeq ORF:</b>	2883 bp
<b>Locus ID:</b>	333050
<b>Cytogenetics:</b>	5 F
<b>Gene Summary:</b>	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 MG222324