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Product datasheet for SC306873

KSR2 (NM_173598) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	KSR2 (NM_173598) Human Untagged Clone
Tag:	Tag Free
Symbol:	KSR2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>SC306873 representing NM_173598.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGATAGACTTGAGCATCTCCAACCTGGAAGGGCTTAGGACCAAATGTGCTACCTCCAACGACCTCACA
CAAAAAGAAATCCGGACCCTGGAGAGCAAGCTGGTGAAGTACTTCAGCCGGCAGCTGTCCTGCAAAAAG
AAGGTAGCCTTGCAGGAGCGCAACGCGGAGCTGGACGGCTTCCCCCAGCTACGGCACTGGTTCCGAATC
GTCGATGTGCGCAAGGAGGTCCTGGAGGAAATCTCCCCCGGCCAGCTGAGCCTGGAGGACCTCTTGGAG
ATGACGGATGAACAGGTGTGCGAGACTGTGGAGAAATACGGAGCCAACCGGGAGGAGTGTGCCCGCCTC
AACGCCTCCCTCTCCTGCCTCAGGAATGTCCACATGTCAGGAGGCAACCTTTCCAAACAAGACTGGACC
ATCCAGTGGCCCACGACAGAGACGGGGAAGGAGAACAATCCCGTGTGCCCCCCGGAGCCCACCCCGTGG
ATCCGCACCCATCTCTCCCAGAGCCCCAGGGTCCCGTCCAAGTGCGTCCAGCACTATTGTCACACCAGC
CCCACTCCCGGGGCCCCTGTGTACACCCACGTGGACAGGCTTACCGTGGACGCCTACCCGGGCTTGTGC
CCGCCCCCGCCACTGGAGTCGGGCCACCGTTCCCTGCCCCCATCGCCCCGGCAGCGGCACGCGGTCCGC
ACCCCGCCGCGCACCCCCAACATCGTCACCACCGTGACCCCGCCGGGCACGCCGCCCATGAGGAAGAAG
AACAAGCTGAAGCCCCCGGGGACCCCACCGCCCTCCTCCCGAAAACTGATACACTTGATCCCGGGATTC
ACCGCGCTGCATCGGAGCAAATCCCACGAGTTCCAGCTGGGGCACCGCGTGGACGAGGCCCACACGCCC
AAAGCCAAGAAGAAGAGCAAACCCTTGAACCTCAAGATCCACAGCAGCGTAGGCAGCTGCGAGAACATC
CCCTCTCAGCAGCGCTCCCCGCTGCTGTCCGAGCGCTCCCTCCGCTCCTTCTTTGTGGGACACGCACCT
TTCCTGCCTTCCACCCCTCCTGTTCACACTGAGGCCAACTTCTCTGCAAACACACTGTCAGTGCCACGC
TGGTCCCCGCAGATCCCTCGCAGAGATCTCGGCAACTCCATCAAGCACAGGTTTTCCACCAAGTACTGG
ATGTCTCAGACGTGCACAGTCTGTGGGAAAGGGATGCTTTTTGGCCTCAAGTGTAAAAACTGCAAGTTA
AAGTGCCACAACAAATGCACCAAAGAAGCCCCACCCTGTCATCTTCTGATCATCCACCGAGGAGATCCA
GCAAGGTTAGTCCGGACAGAGTCCGTTCCGTGTGACATCAACAACCCTCTACGGAAGCCACCTCGCTAT
TCAGACCTGCACATCAGTCAGACGCTCCCCAAAACCAACAAAATCAACAAGGACCACATCCCTGTCCCT
TACCAGCCAGACTCCAGCAGCAACCCCTCCTCCACGACGTCCTCCACGCCCTCCTCGCCAGCACCCCCC
CTCCCTCCTAGTGCCACGCCGCCTTCTCCCCTACACCCTTCCCCACAGTGCACACGGCAGCAGAAGAAC
TTCAACCTGCCAGCATCCCACTACTACAAATACAAGCAGCAGTTCATCTTCCCAGATGTGGTGCCGGTG
CCGGAGACGCCGACCCGGGCGCCCCAGGTCATCCTGCATCCGGTGACCTCGAATCCAATCTTGGAAGGA
AATCCATTACTTCAAATTGAAGTGGAGCCAACGTCGGAGAATGAAGAGGTCCATGATGAGGCCGAAGAG
TCAGAGGATGACTTCGAGGAGATGAACCTGTCCCTCCTCTCGGCCCGGAGCTTCCCACGCAAGGCCAGC
CAGACCAGCATCTTCCTTCAGGAGTGGGACATCCCCTTTGAGCAGCTGGAGATCGGCGAGCTCATTGGA
AAGGGCCGCTTTGGGCAAGTGTACCACGGCCGCTGGCATGGCGAGGTGGCCATCCGGCTGATTGACATT
GAGAGGGACAACGAGGACCAGCTCAAGGCCTTCAAGCGGGAGGTGATGGCCTACAGGCAGACACGGCAT
GAGAACGTGGTGCTTTTCATGGGTGCCTGCATGAGCCCGCCTCACCTGGCCATCATCACCAGCCTCTGT
AAGGGACGGACGCTCTATTCCGTTGTGAGGGATGCCAAAATCGTTTTGGATGTCAACAAAACCAGGCAG
ATTGCTCAAGAAATTGTGAAGGGCATGGGCTACCTCCACGCCAAGGGAATCCTACACAAGGACCTCAAG
TCAAAGAACGTCTTCTATGACAACGGCAAAGTGGTCATCACGGACTTTGGACTCTTCAGCATTTCTGGG
GTGCTGCAGGCTGGCAGGCGGGAGGACAAACTGCGCATCCAGAATGGCTGGCTATGCCACCTGGCACCA
GAGATCATCCGCCAGCTGTCCCCCGACACAGAGGAGGATAAGCTCCCCTTCTCCAAGCACTCTGACGTC
TTTGCCCTTGGCACAATCTGGTATGAACTCCACGCCAGGGAATGGCCTTTCAAGACCCAACCAGCAGAG
GCAATAATCTGGCAAATGGGCACAGGCATGAAACCCAACCTCAGCCAGATTGGCATGGGAAAAGAAATC
TCGGACATTCTTCTCTTCTGCTGGGCCTTTGAACAAGAAGAGAGACCTACCTTCACCAAGCTCATGGAC
ATGCTGGAGAAACTGCCAAAGCGAAACCGTCGCCTGTCTCACCCTGGACATTTCTGGAAGTCTGCAGAG
CTGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

Plasmid Map:

ACCN:	NM_173598
Insert Size:	2766 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_173598.4
RefSeq Size:	17008 bp
RefSeq ORF:	2766 bp
Locus ID:	283455
UniProt ID:	Q6VAB6
Cytogenetics:	12q24.22-q24.23
Protein Families:	Druggable Genome, Protein Kinase
MW:	104.3 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.[UniProtKB/Swiss-Prot Function]