

Product datasheet for **RG218367**

IQSEC2 (NM_015075) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	IQSEC2 (NM_015075) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IQSEC2
Synonyms:	BRAG1; IQ-ArfGEF; MRX1; MRX18; MRX78
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG218367 representing NM_015075
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCCCCCGGGAGGAGCAGCAGGTCCACAGCGTCTCATACTCTACACCAGTATTGCTGTCCTACTC
 AGGTCTTGACTCCATGAAGCTTACCCCTCAGGCAGGCTGGCAGAGAGCAGTGTGGAGGGTGATGCCCC
 AGGCAGTGACCTGAGCACAGCGTTGATAGTCCTGGGAGCCAACCCCTACCGGCTGAGCCAGCTGCC
 CCCTCCAGCAGCCACATGGGGGGCCCCCTGCTGGAGTGGCCTTCCCTGGGCTCAGCGGCACGCCTCC
 AGCCAGCCAGTGTGCCCTGAGGAAGCAGGAGGAGGAGATAAAGCGCTCCAAGGCCATCGGACAG
 CTATGAACTCTCCACAGACCTGCAGGACAAGAAGGTGAAATGCTGGAGAGGAAGTATGGGGCTCTTC
 CTGAGCCGAGGGCTGCCAGGACCATCCAGACAGCCTCCGCCAGTACCGCATGAACAAGAACTTTGAGC
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 CTCCTTTGAGGAGTATGAGAAGGCACAGAACCCCGCTACTTCGAGGGCAAGCCTGCCTCGCTGGACGAG
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 CTCCTTCTCCAAACAGGTAAGTCTCTGGCTGAATCCATCGACGAAGCCCTGAACTGCCACCCGTCAGGG
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 ACAGTCTAAGGGAGCCTCCGGCTACCGGCTGTGCAAGCAGACTTACCAGCGGGAGACAAGGCATAGCTG
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 AAGAAGCCAGAGAAGGTATCCAGTATCTGATCGAGCGGGCTTCTGTGACAGACACCCGTTGGGAGTGG
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 GTCGGAGCTGGAGAAGCAGAAAGGTATGATGCGGCCTAACGCCTCACAGCCTGGAGGGGCCAAGGACTCA
 GTGAATGGGACGATGGCCCGAGTAGCCTGGAGGACACTTACGGGCAGGCGATGGGCTCAAACGGGGCC
 CACTCAGCAGTTCCTGCGAGACCTCTCTGATGCAGGGTCTGTTAT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG218367 representing NM_015075
Red=Cloning site Green=Tags(s)

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MEPPGRSSRSTASHTLHQYCCPTQVLDSMKLTPSGRLAESSVEGDAPGSDLSTAVDSPGSQPPYRLSQLP
PSSSHMGPPAGVGLPWAQRARLQPASVALRKQEEEEIKRSKALSDSYELSTDLDQKKVEMLERKYGGSF
LSRRAARTIQTAFRQYRMNKNFERLRSSASESRMSRRIILSNMRMQSFEEYEKAQNPAYFEGKPAASLDE
GAMAGARSHRLERGLPYGGSCGGIDGGGSSVTTSGEFSDNITELEDSFSKQVKSLAESIDEALNCHPSG
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CSPHGTLKHKGPPGRAPIPHRHYPAPEGPAPAPPGLPPAPNSGTGPSGVAGRRRLGKCEAAGENSDDGGD
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KKPEKGIQYLIERGFLSDTPVGVAFILERKGLSRQMIGEFLGNRQKQFNRDVLDVVDEMDSSMDLDD
ALRKFQSHIRVQGEAQKVERLIEAFSQRYCVCNPALVRQFRNPDTIFILAFIILLNTDMYSPVKAERK
MKLDDFIKNLRGVDNAGEDIPRDLVGIYQRIQGRELRTNDHVSQVQAVERMIVGKKPVLSPHRRLVCC
CQLYEVPDPNRPQRLGLHQREVFLFNDLLVVTIKIFQKKKILVTYSFRQSFPLVEMHMQLFQNSYYQFGIK
LLSAVPGGERKVLIIFNAPSLQDRLRFTSDLRESIAEVQEMEKEYRVESELEKQKGMMPNPNASQPGGAKDS
VNGTMARSSLEDTYGAGDGLKRGALSSSLRDLSDAGVCY
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TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

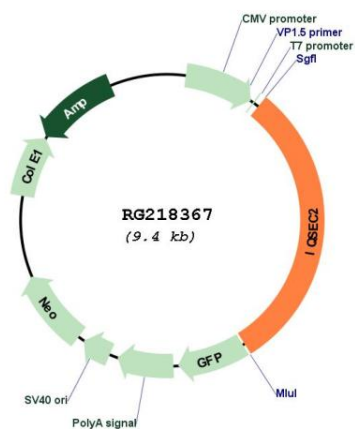


ACCN: NM_015075

ORF Size: 2847 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
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_015075.2
RefSeq Size:	5248 bp
RefSeq ORF:	2850 bp
Locus ID:	23096
UniProt ID:	Q5JU85
Cytogenetics:	Xp11.22
Protein Pathways:	Endocytosis
Gene Summary:	<p>This gene encodes a guanine nucleotide exchange factor for the ARF family of small GTP-binding proteins. The encoded protein is a component of the postsynaptic density at excitatory synapses, and may play a critical role in cytoskeletal and synaptic organization through the activation of selected ARF substrates including ARF1 and ARF6. Mutations in this gene have been implicated in nonsyndromic X-linked cognitive disability. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Aug 2011]</p>

Product images:



Circular map for RG218367