

Product datasheet for **RC239549**

SECISBP2 (NM_001282689) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SECISBP2 (NM_001282689) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SECISBP2
Synonyms:	SBP2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC239549 representing NM_001282689
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGTTAGAGTCCTCAGAAGCATGTGTCTTCCCAGCTCTGCAGCCACATACTATCCGTTTGTTCAGGAA
CCACCAGTGACAGAAATGTTTACTCAGTGCCTGGCTCCCAGTATCTTTATAACCAACCCAGTTGTTACCG
AGGTTTTCAAACAGTGAAGCATCGAAATGAGAACACATGCCCTCTCCACAAGAAATGAAAGCTCTGTTT
AAGAAGAAAACCTATGATGAGAAAAACGATGATCAGCAAAAGTTTGACAGTGAAGGGCTGATGGAA
CTATATCATCTGAGATAAAATCAGCTAGAGGTTACATCATTTGTCCATTTACGCTGAGAATAGTTTGAA
ATCAGATGGTTACCATAAGCGAACAGACAGGAAATCCAGAATCATTGCAAAAAATGTATCTACCTCCAAA
CCTGAGTTTGAATTTACCACACTGGACTTTCCTGAACTGCAAGGTGCAGAGAACAATATGCAGAGATAC
AGAAGCAACCCAAGTGGGACCTGTCCACTCTGTCTTACCGACATTTCTTCTAAGAGAAGTAGTAAA
ACCAGCTGCAGTGTATCAAAGGGTGAATAGTGGTGAATAAACCCTGAATCTGTAAGTCTGTAAT
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CATTATCTACAGAACTGTGAGCAGCCCTAAAAATGTTACTTCTATGATAAACTTAAAGACCATTGCTTC
ATCAGCAGATCCTAAAAATGTTAGTATACCATCTTCTGAAGCTTTATCTTCGGATCCTTCTACAACAAA
GAAAAACACATTATTCATCCTACCCAAAAGTCTAAAGCATCACAAGGTAGTGACCTTGAACAAAAATGAAG
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ACACCGAAATTTCAATCTAAGCAGCAGCCACAGGATAATTTAAAAAATATGTAAGAAGAGCCAGCTTC
CAGTGCAGTTGGACTTGGGGGCATGCTGACAGCCCTGGAGAAGAAGCAGCACTCTCAGCATGCAAAGCA
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GGAGAGAGTGGTGGTGTGACCAGTTTCCCGAGCAGGCAGAGCTGTGAGGGCCAGAGGGGATGGACGAAC
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ACCGTATGTACCAGAAAGATCCAGTCAAGGCCAAGACTAAACGTGCACTTGTGTTGGGGTTGAGGGAGGT
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AAAGGTGGGCTGGATGACACTTTGCACACAATTATTGATTATGCCTGTGAGCAGAACATTCCTTTGTGT
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AAGACCATGCTGGAGAATGTGCAGCAGGAGCTGGTGGGAGAGCCAGGCCTCAGGCACCTCCAGCCTAC
CCACACAGGGCCCGACTGCCCTGCAGAAGATGGCCCCCAGCCCTGAAAGAAAAAGAAGAGCCACACTA
CATTGAAATCTGAAAAAACATCTGGAAGCATAACAGTGGATGTACCCTGGAGCTAGAAGAATCCTTGGAG
GCTTCAACCTCTCAAATGATGAATTTGAATTTA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239549 representing NM_001282689
 Red=Cloning site Green=Tags(s)

MVRVLRSMCLPQLCSHILSVCSGTTSDRNVVSVPGSQYL YNQPSCYRGFQTVKHRNENTCPLPQEMKALF
 KKKTYDEKKT YDQKFDSEADGTISSEIKSARGSHHLSIYAENLSKSDGYHKRTRDKSRIIAKNVSTSK
 PEFEF T TLDPELQGAENNMSEIQKQPKWGPVHSVSTDISLLREVVKPAAVLSKGEIVVKNPNESVTAN
 AATNSPCTREL SWTPMGYVVRQTLSTELSAAPKNVTSMINLKT IASSADPKNVSI PSSEALSSDPSYNK
 EKHI IHPTQKSKASQGS DLEQNEASRKNKKKKEKSTSKYEVLTVQEPRIEDAEEFPNLAVASERRDRIE
 TPKFQSKQQPQDNFNKNNVKSQLPVQLDLGGMLTALEKKQHSQHAKQSSKPVVVSVGAVPVL SKECASGE
 RGRRMSQMKT PHNPLDSSAPLMKKGKQREIPKAKKPTSLKKIILKERQERKQRLQENAVSPAFTSDDTQD
 GESGGDDQFPEQAE LSGPEGMDL I STPSVEDKSEPPGTELQRDTEASHLAPNHTTFPKIHSRRFRDYC
 SQML SKEVDACVTDLLKEL VRFQDRMYQKDPVKA KTRRLV LGLREVLKHLK LKLCV I I SPNCEKIQS
 KGG LDDTLHT I IDYACEQNI P VFALNRKALGRSLNKAVPVSVVGIFSYDGAQDQFHKMVELTVAARQAY
 KTMLENVQQL VGEP RPQAPPSLPTQGPSCPAEDGPPALKEKEEPHYIEIWKKHLEAYSGCTLELEESLE
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

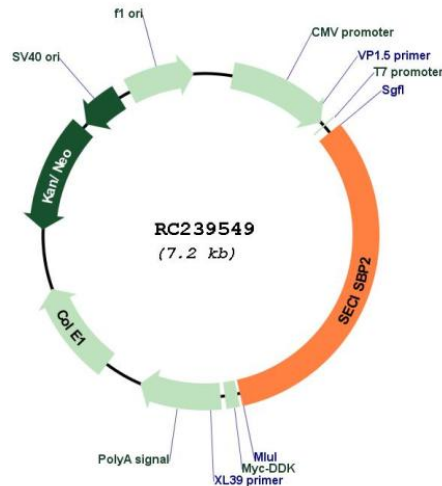
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001282689

ORF Size: 2343 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_001282689.2](#)

RefSeq Size: 3414 bp

RefSeq ORF: 2346 bp

Locus ID: 79048

UniProt ID: [Q96T21](#)

Cytogenetics: 9q22.2

MW: 87.8 kDa

Gene Summary: The protein encoded by this gene is one of the essential components of the machinery involved in co-translational insertion of selenocysteine (Sec) into selenoproteins. Sec is encoded by the UGA codon, which normally signals translation termination. The recoding of UGA as Sec codon requires a Sec insertion sequence (SECIS) element; present in the 3' untranslated regions of eukaryotic selenoprotein mRNAs. This protein specifically binds to the SECIS element, which is stimulated by a Sec-specific translation elongation factor. Mutations in this gene have been associated with reduction in enzymatic activity of type II iodothyronine deiodinase (a selenoprotein) and abnormal thyroid hormone metabolism. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Aug 2017]