

Product datasheet for **RG239560**

SECISBP2 (NM_001282690) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SECISBP2 (NM_001282690) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SECISBP2
Synonyms:	SBP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG239560 representing NM_001282690.
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGGCCTTTGGAGCTTCAACTTTCCACCTCAGTATTTATCTTCTGAGATAACTTTCATCCATATGCC
TATTCCTTTATACCCTTGACTCCACACAGAATGTTTACTCAGTGCCTGGCTCCCAGTATCTTTATAAC
CAACCCAGTTGTTACCGAGGTTTTCAAACAGTGAAGCATCGAAATGAGAACACATGCCCTCTCCACAA
GAAATGAAAGCTCTGTTTAAAGAAGAAAACCTATGATGAGAAAAAACGTATGATCAGCAAAAAGTTTGAC
AGTGAAAGGGCTGATGGAACATATCATCTGAGATAAAATCAGCTAGAGGTTACATCATTTGTCCATT
TACGCTGAGAATAGTTTGAATCAGATGGTTACCATAAGCGAACAGACAGGAAATCCAGAATCATTGCA
AAAAATGTATCTACCTCCAAACCTGAGTTTGAATTTACCACACTGGACTTTCCTGAACTGCAAGGTGCA
GAGAACAATATGTCAGAGATACAGAAGCAACCAAGTGGGACCTGTCCACTCTGTCTCTACCGACATT
TCTCTTCTAAGAGAAGTAGTAAAACCAGCTGCAGTGTATCAAAGGGTGAATAGTGGTAAAAAATAAC
CCAAATGAATCTGTAACCTGCTAATGCCGCTACCAATTCTCCTTCATGTACAAGAGAGTTATCTTGGACA
CCAATGGGTTATGTTGTTGACAGACATTATCTACAGAAGTGTACAGCAGCCCTAAAAATGTTACTTCT
ATGATAAACTTAAAGACCATTGCTTCATCAGCAGATCCTAAAAATGTTAGTATACCATCTTCTGAAGCT
TTATCTTCGGATCCTTCTACAACAAAGAAAAACACATTATTCATCCTACCCAAAAGTCTAAAGCATCA
CAAGGTAGTGACCTTGAACAAAAAGAGCCTCAAGAAAGAATAAGAAAAAGAAAGAAAAATCTACATCA
AAATATGAAGTCTGACAGTTCAAGAGCCTCAAGGATTGAAGATGCCGAGGAATTTCCCAACCTGGCA
GTTGCATCTGAAAGAAGAGACAGAATAGAGACACCGAAATTTCAATCTAAGCAGCAGCCACAGGATAAT
TTTTAAAAATAATGTAAGAAGAGCCAGCTTCCAGTGCAGTTGGACTTGGGGGGCATGCTGACAGCCCTG
GAGAAGAAGCAGCACTCTCAGCATGCAAAGCAGTCTCCAAACCCAGTGGTAGTCTCAGTTGGAGCAGTG
CCAGTCCCTTTCCAAAGAATGTGCATCAGGGGAGAGAGGGCCCGCATGAGTCAAATGAAGACCCCGCAC
AATCCCTTGACTCCAGCGCCCACTGATGAAGAAAGGAAGCAGAGGGAGATCCCAAGGCCAAGAAG
CCAACCTCACTGAAGAAGATTATTTGAAAGAACGGCAAGAGAGAAAGCAGCGTCTCCAAGAAAATGCT
GTGAGTCCAGCTTTTACCAGTGATGACACACAAGATGGAGAGAGTGGTGGTATGACCAAGTTTCCCGAG
CAGGCAGAGCTGTCCAGGCCAGAGGGGATGGACGAACTGATCTCCACTCCTTCGTTGAGGACAAGTCT
GAAGAGCCACCAGGCACAGAGCTCCAGAGGGACACAGAGGCTCCACCTTGCTCCCAATCACACCACC
TTCCCTAAGATCCACAGCCGAGATTCAAGGATTACTGCAGCCAGATGCTTAGTAAAGAAGTGGATGCT
TGTGTTACCGACTACTCAAAGAACTGGTCCGTTTCCAAGACCGTATGTACCAGAAAGATCCAGTCAAG
GCCAAGACTAAACGTCGACTTGTGTTGGGGTTGAGGGAGGTTCTCAAACCTGAAGCTCAAAAACTG
AAATGTGTCAATATTTCTCCCACTGTGAGAAGATACAGTCAAAAAGTGGGCTGGATGACTTTGCAC
ACAATTATTGATTATGCCTGTGAGCAGAACATTCCTTTGTGTTGCTCTCAACCGCAAAGCTCTGGGG
CGCAGTTTGAATAAGGCAGTTCTCTGTCAGTGTGGTGGGGATCTTCAGCTATGATGGGGCCAGGATCAG
TTCCACAAGATGGTTGAGCTGACAGTGGCGGCCGACAGGCGTACAAGACCATGCTGGAGAATGTGCAG
CAGGAGCTGGTGGGAGAGCCAGGCCTCAGGCACCTCCAGCCTACCCACACAGGGCCCCAGCTGCCCT
GCAGAAGATGGCCCCCAGCCCTGAAAGAAAAAGAAGGCCACACTACATTGAAATCTGGAAAAACAT
CTGGAAGCATAACAGTGGATGTACCCTGGAGCTAGAAGAATCCTTGGAGGCTTCAACCTCTCAAATGATG
AATTTGAATTTA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG239560
Blue=ORF Red=Cloning site Green=Tag(s)

MAFGASTFPPQYLSSEITLHPYAYSPTYLDSTQNVYVPGSQYL YNQPSCYRGFQTVKHRNENTCPLPQ
EMKALFKKTYDEKKT YDQKFDSEADGTISSEIKSARGSHHLSIYAENSLKSDGYHKRTDRKSRIIA
KNVSTSKPEFEFTTLDPELQGAENNMSEIQKQPKWGPVHSVSTDISLLREVVKPAAVLSKGEIVVKNN
PNESVTANAATNSPCTREL SWTPMGYVVRQTLSTELSAAPKNVTSMINLKTIASSADPKNVSIPSSEA
LSSDPSYNKEKHI IHPTQKSKASQGSLEQNEASRKNKKKKEKSTSKYEVLTVQEPPIEDAEFPNLA
VASERRDRIETPKFQSKQPPQDNFNKNNVKKSQLPVQLDLGGMLTALEKKQHSQHAKQSSKPVVSVGAV
PVL SKECASGERGRMSQMKTPHNPLDSSAPLMKKGKQREIPKAKKPTSLKKIILKERQERKQRLQENA
VSPAFTSDDTQDGE SGGDDQFPEQAELSGPEGMDELISTPSVEDKSEPPGTELQRDTEASHLAPNHTT
FPKIHSRRFRDYCSQMLSKEVDACVTDLLKELVRFQDRMYQKDPVAKTKRRLVLGLREVLKHLKLLKL
KCVIISPNC EIQSKGGLDDLHTIIDYACEQNIPFVFALNRKALGRSLNKAVPVSVVGIFSYDGAQDQ
FHKMVELTVAARQAYKTML ENVQQELVGEPRPQAPP SLPTQGPSCPAEDGPPALKEKEEPHYIEIWKKH
LEAYSGCTLEEESLEASTSQMMNLNL

TRTRPLEME SDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYP SGYENPFLHAINNGGYTNRIEKYEDGGVLHVSFSYRYEAGRVI GDFKVMGTGFPE
SVIFTDKIIIRS NATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_001282690

ORF Size: 2358 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](#)

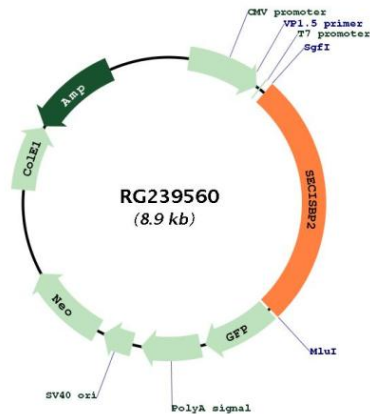
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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).

RefSeq: NM_001282690.1, NP_001269619.1
RefSeq Size: 3612 bp
RefSeq ORF: 2361 bp
Locus ID: 79048
Cytogenetics: 9q22.2
MW: 88.4 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]

Product images:



Circular map for RG239560