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Product datasheet for RC206346

SECISBP2 (NM_024077) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SECISBP2 (NM_024077) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SECISBP2
Synonyms:	SBP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC206346 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTCGGAGGGGCCGCGGGAGCCCGAAAGCGAGGGCATCAAGTTATCAGCAGATGTCAAACCATTTG
TCCCCAGATTTGCCGGGCTCAATGTGGCATGGTTAGAGTCCTCAGAAGCATGTGTCTTCCCCAGCTCTGC
AGCCACATACTATCCGTTTGTTCAGGAACCACCAGTGACAGAGCAGAAAATATATACTGAAGACATGGCC
TTTGGAGCTTCAACTTTTCCACCTCAGTATTTATCTTCTGAGATAACTCTTCATCCATATGCCTATTCTC
CTTATACCCTTGACTCCACACAGAATGTTTACTCAGTGCCTGGCTCCCAGTATCTTTATAACCAACCCAG
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GCTCTGTTTAAGAAGAAAACCTATGATGAGAAAAAAACGTATGATCAGCAAAAGTTTGACAGTGAAAGGG
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GAAAGAACGGCAAGAGAGAAAGCAGCGTCTCCAAGAAAATGCTGTGGGTCCAGCTTTTACCAGTGATGAC
ACACAAGATGGAGAGAGTGGTGGTGATGACCAGTTTCCCGAGCAGGCAGAGCTGTCAGGGCCAGAGGGGA
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CAGGCGTACAAGACCATGCTGGAGAATGTGCAGCAGGAGCTGGTGGGAGAGCCCAGGCCTCAGGCACCTC
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206346 protein sequence
Red=Cloning site Green=Tags(s)

MASEGPREPESEGIKLSADVKPFVPRFAGLNVAWLESSEACVFPSSAATYYPFVQEPPVTEQKIYTEDMA
FGASTFPPQYLSSEITLHPYAYSPYTLDSTQNVYSVPGSQYLYNQPSCYRGFQTVKHRNENTCPLPQEMK
ALFKKKTYDEKKTYDQQKFDSERADGTISSEIKSARGSHHLSIYAENSLKSDGYHKRTDRKSRIIAKNVS
TSKPEFEFTTLDFPELQGAENNMSEIQKQPKWGPVHSVSTDISLLREVVKPAAVLSKGEIVVKNNPNESV
TANAATNSPSCTRELSWTPMGYVVRQTLSTELSAAPKNVTSMINLKTIASSADPKNVSIPSSEALSSDPS
YNKEKHIIHPTQKSKASQGSDLEQNEASRKNKKKKEKSTSKYEVLTVQEPPRIEDAEEFPNLAVASERRD
RIETPKFQSKQQPQDNFKNNVKKSQLPVQLDLGGMLTALEKKQHSQHAKQSSKPVVVSVGAVPVLSKECA
SGERGRRMSQMKTPHNPLDSSAPLMKKGKQREIPKAKKPTSLKKIILKERQERKQRLQENAVGPAFTSDD
TQDGESGGDDQFPEQAELSGPEGMDELISTPSVEDKSEEPPGTELQRDTEASHLAPNHTTFPKIHSRRFR
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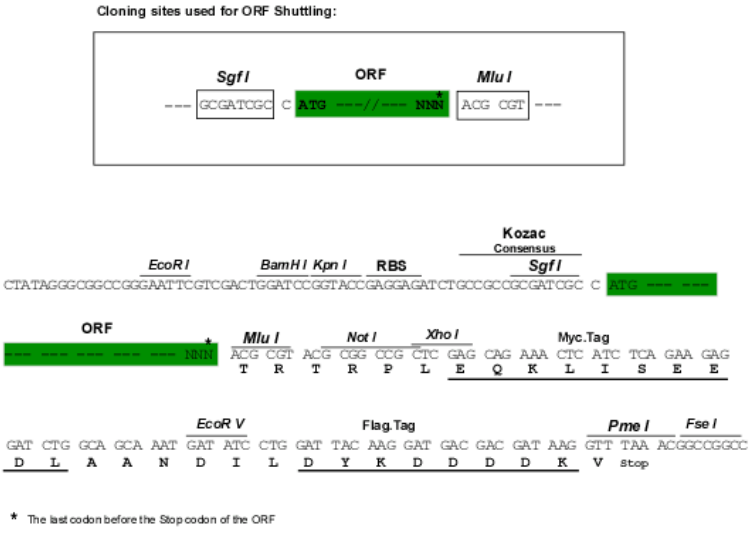
QAYKTMLENVQQELVGEPRPQAPPSLPTQGPSCPAEDGPPALKEKEEPHYIEIWKKHLEAYSGCTLELEE
SLEASTSQMMNLNL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6290_h01.zip

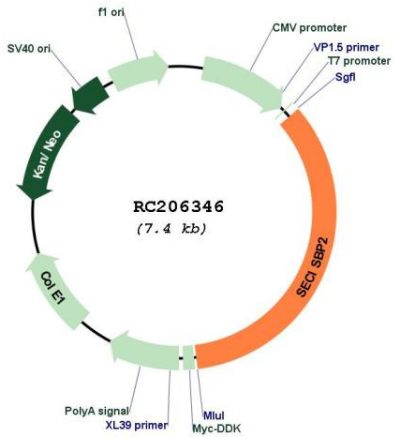
Restriction Sites: SgfI-MluI

Cloning Scheme:

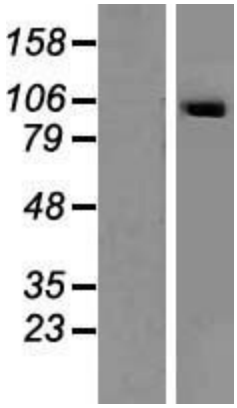


ACCN:	NM_024077
ORF Size:	2562 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_024077.5
RefSeq Size:	3535 bp
RefSeq ORF:	2565 bp
Locus ID:	79048
UniProt ID:	Q96T21
Cytogenetics:	9q22.2
Domains:	Ribosomal_L7Ae
MW:	95.4 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 RC206346



Western blot validation of overexpression lysate (Cat# [LY411333]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206346 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).