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Product datasheet for RC217230

Separase (ESPL1) (NM_012291) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Separase (ESPL1) (NM_012291) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ESPL1
Synonyms:	ESP1; SEPA
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC217230 representing NM_012291 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGAGGAGCTTCAAAAGAGTCAACTTTGGGACTCTGCTAAGCAGCCAGAAGGAGGCTGAAGAGTTGCTGC CCGCCTTGAAGGAGTTCCTGTCCAACCCTCCAGCTGGTTTTCCCAGCAGCCGATCTGATGCTGAGAGGAG ACAAGCTTGTGATGCCATCCTGAGGGCTTGCAACCAGCAGCTGACTGCTAAGCTAGCTTGCCCTAGGCAT CTGGGGAGCCTGCTGGAGCTGGCAGAGCTGGCCTGTGATGGCTACTTAGTGTCTACCCCACAGCGTCCTC CCCTCTACCTGGAACGAATTCTCTTTGTCTTACTGCGGAATGCTGCTGCACAAGGAAGCCCAGAGGCCAC ACTCCGCCTTGCTCAGCCCCTCCATGCCTGCTTGGTGCAGTGCTCTCGCGAGGCTGCTCCCCAGGACTAT GAGGCCGTGGCTCGGGGCAGCTTTTCTCTGCTTTGGAAGGGGGCAGAAGCCCTGTTGGAACGGCGAGCTG CATTTGCAGCTCGGCTGAAGGCCTTGAGCTTCCTAGTACTCTTGGAGGATGAAAGTACCCCTTGTGAGGT TCCTCACTTTGCTTCTCCAACAGCCTGTCGAGCGGTAGCTGCCCATCAGCTATTTGATGCCAGTGGCCAT GGTCTAAATGAAGCAGATGCTGATTTCCTAGATGACCTGCTCTCCAGGCACGTGATCAGAGCCTTGGTGG GTGAGAGAGGGAGCTCTTCTGGGCTTCTTTCTCCCCAGAGGGCCCTCTGCCTCTTGGAGCTCACCTTGGA ACACTGCCGTCGCTTTTGCTGGAGCCGCCACCATGACAAAGCCATCAGCGCAGTGGAGAAGGCTCACAGT TACCTAAGGAACACCAATCTAGCCCCTAGCCTTCAGCTATGTCAGCTGGGGGTTAAGCTGCTGCAGGTTG GGGAGGAAGGACCTCAGGCAGTGGCCAAGCTTCTGATCAAGGCATCAGCTGTCCTGAGCAAGAGTATGGA GGCACCATCACCCCCACTTCGGGCATTGTATGAGAGCTGCCAGTTCTTCCTTTCAGGCCTGGAACGAGGC ACCAAGAGGCGCTATAGACTTGATGCCATTCTGAGCCTCTTTGCTTTTCTTGGAGGGTACTGCTCTCTTC TGCAGCAGCTGCGGGATGATGGTGTGTATGGGGGCTCCTCCAAGCAACAGCAGTCTTTTCTTCAGATGTA CTTTCAGGGACTTCACCTCTACACTGTGGTGGTTTATGACTTTGCCCAAGGCTGTCAGATAGTTGATTTG GCTGACCTGACCCAACTAGTGGACAGTTGTAAATCTACCGTTGTCTGGATGCTGGAGGCCTTAGAGGGCC TGTCGGGCCAAGAGCTGACGGACCACATGGGGATGACCGCTTCTTACACCAGTAATTTGGCCTACAGCTT CTATAGTCACAAGCTCTATGCCGAGGCCTGTGCCATCTCTGAGCCGCTCTGTCAGCACCTGGGTTTGGTG AAGCCAGGCACTTATCCCGAGGTGCCTCCTGAGAAGTTGCACAGGTGCTTCCGGCTACAAGTAGAGAGTT

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Protein Sequence:

>RC217230 representing NM_012291
Red=Cloning site Green=Tags(s)

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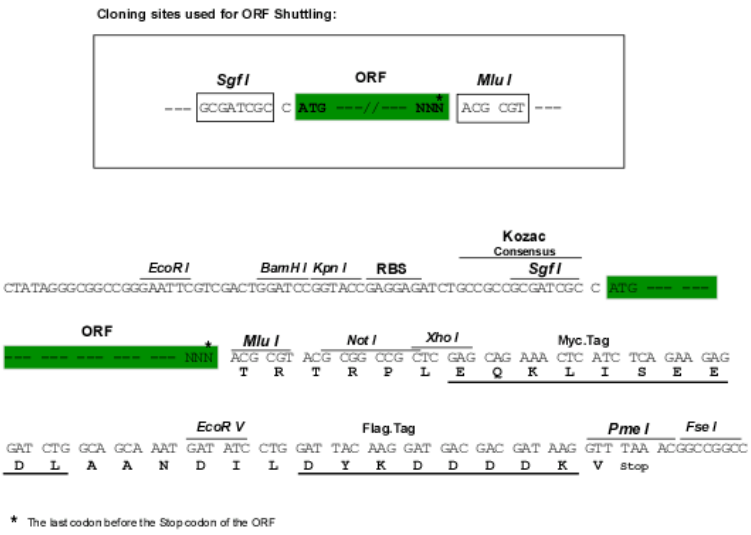
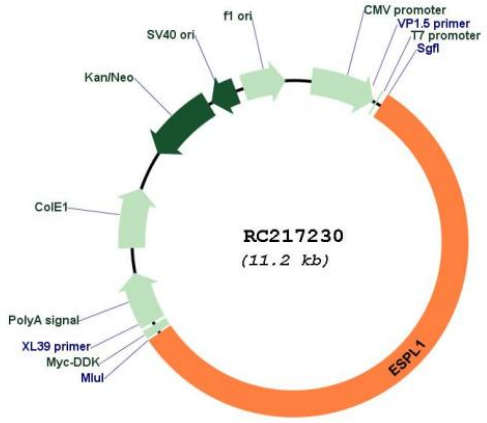
Chromatograms: https://cdn.origene.com/chromatograms/mk8115_f12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_012291
ORF Size:	6360 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.
RefSeq:	NM_012291.5

RefSeq Size:	6641 bp
RefSeq ORF:	6363 bp
Locus ID:	9700
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Cell cycle, Oocyte meiosis
MW:	233.2 kDa
Gene Summary:	Stable cohesion between sister chromatids before anaphase and their timely separation during anaphase are critical for chromosome inheritance. In vertebrates, sister chromatid cohesion is released in 2 steps via distinct mechanisms. The first step involves phosphorylation of STAG1 (MIM 604358) or STAG2 (MIM 300826) in the cohesin complex. The second step involves cleavage of the cohesin subunit SCC1 (RAD21; MIM 606462) by ESPL1, or separase, which initiates the final separation of sister chromatids (Sun et al., 2009 [PubMed 19345191]). [supplied by OMIM, Nov 2010]