

Product datasheet for **SC112532**

ERAP2 (NM_022350) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ERAP2 (NM_022350) Human Untagged Clone
Tag:	Tag Free
Symbol:	ERAP2
Synonyms:	L-RAP; LRAP
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_022350, the custom clone sequence may differ by one or more nucleotides

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ATGTTCCATTCTTCTGCAATGGTTAATTCACACAGAAAACCAATGTTTAAACATTCACAGAGGATTTTACT
GCTTAACAGCCATCTTGCCCAAATATGCATTTGTTCTCAGTTCTCAGTGCCATCTAGTTATCACTTCCAC
TGAGGATCCTGGGGCTTCCAGTAGCCACTAATGGGGAACGATTTCTTGGCAGGAGCTAAGGCTCCCC
AGTGTGGTCATTCTCTCCATTATGACCTCTTTGTCCACCCCAATCTCACCTCTCTGGACTTTGTTGCAT
CTGAGAAGATCGAAGTCTTGGTCAGCAATGCTACCCAGTTTATCATCTTGACAGCAAAGATCTTGAAT
CACGAATGCCACCCTTCAGTCAGAGGAAGATTCAAGATACATGAAACCAGGAAAAGAACTGAAAGTTTTG
AGTTACCCTGCTCATGAACAAATGCACTGCTGGTTCCAGAGAACTTACGCCTCACCTGAAATACTATG
TGGCTATGGACTTCCAAGCCAAGTTAGGTGATGGCTTTGAAGGGTTTTATAAAAGCACATACAGAATCT
TGGTGGTGAACAAGAATTCTTGCAGTAACAGATTTTGAAGCAACCCAGGCACGCATGGCTTTCCCTTGC
TTTGATGAACCGTTGTTCAAAGCCAACCTTTCAATCAAGATACGAAGAGAGAGCAGGCATATTGCACTAT
CCAACATGCCAAAGGTTAAGACAATTGAACTTGAAGGAGGTCTTTTGAAGATCACTTTGAAACTACTGT
AAAAATGAGTACATACCTTGTAGCTACATAGTTTGTGATTTCCACTCTCTGAGTGGCTTCACTTATCA
GGGGTCAAGGTGTCCATCTATGCATCCCCAGACAAACGGAATCAAACACATTATGCTTTGACAGGCATCAC
TGAAGCTACTTGATTTTTATGAAAAGTACTTTGATATCTACTATCCACTCTCAAACCTGGATTTAATTGC
TATTCCTGACTTTGCACCTGGAGCCATGGAAAATTGGGGCCTCATTACATATAGGGAGACGTCACCTGCTT
TTTGACCCCAAGACCTCTTCTGCTTCCGATAAACTGTGGGTCAACAGAGTCATAGCCATGAACTGGCGC
ACCAGTGGTTTGGCAACCTGGTCACAATGGAATGGTGGATGATATTTGGCTTAAAGAGGGTTTTGCAAA
ATACATGGAACCTATCGCTGTTAATGCTACATATCCAGAGCTGCAATTTGATGACTATTTTTTGAATGTG
GTTTTGAAGTAATTACAAAAGATTCAATGAATTCATCCCGCCCTATCTCAAACAGCGGAAACCCCGA
CTCAAATACAGGAAATGTTTGTGAAGTTTCTATAACAAGGGAGCTTGTATTTGAATATGCTCAAGGA
TTTTCTGGGTGAGGAGAAATCCAGAAAGGAATAATTCAGTACTTAAAGAGTTCAGCTATAGAAATGCT
AAGAATGATGACTTGTGGAGCAGTCTGTCAAATAGTTGTTTAGAAAGTGATTTTACATCTGGTGGAGTTT
GTCATTCGGATCCCAAGATGACAAGTAACATGCTCGCCTTTCTGGGGGAAAATGCAGAGGTCAAAGAGAT
GATGACTACATGGACTCTCCAGAAAGGAATCCCCCTGCTGGTGGTTAAACAAGACGGGTGTTCACTCCGA
CTGCAACAGGAGCGCTTCTCCAGGGGGTTTTCCAGGAAGACCCTGAATGGAGGGCCCTGCAGGAGAGGT
ACCTGTGGCATAATCCATTGACCTACTCCACGAGTTCTTCTAATGTGATCCACAGACACATTCTAAAATC
AAAGACAGATACTCTGGATCTACCTGAAAAGACCAGTTGGGTGAAATTTAATGTGGACTCAAATGGTTAC
TACATCGTTCACTATGAGGGTCAATGGATGGGACCAACTCATTACACAGCTGAATCAGAACCACACTTC
TCAGACCTAAGGACAGAGTAGGTCTGATTCATGATGTGTTTCAGCTAGTTGGTGCAGGGAGACTGACCC
AGACAAAGCTCTTGACATGACTTACTACCTCCAACATGAAACAAGCAGCCCCGCACTTCTCGAAGGTCTG
AGTTACTTGGAATCGTTTTACCACATGATGGACAGAAGGAATAATTCAGATATCTCTGAAAACCTCAAGC
GTTACCTTCTTCAGTATTTAAGCCAGTGATTGACAGGCAAAGCTGGAGTGACAAGGGCTCAGTCTGGGA
CAGGATGCTCCGCTCGGCTCTCTGAAGCTGGCCTGTGACCTGAACCATGCTCCTTGCATCCAGAAAAGCT
GCTGAACCTTCTCCAGTGGATGGAATCCAGTGGAAAATTAATATACCAACAGATGTTTTAAAGATTG
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AAGTGTGAACAAAACAAAATTCTGTATGCTTTGTCAACGAGCAAGCATCAGGAAAAGTTACTGAAGTTA
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TGACTTGGGCTCATATGACATAAGGATGATCATCTCTGGCACAACAGCTCACTTTTCTTCAAGGATAAG
TTGCAAGAGGTGAAACTATTTTTTGAATCTCTTGGGCTCAAGGATCACATCTGGATATTTTTCAAACCTG
TTCTGAAACGATAACCAAAAATATAAAATGGCTGGAGAAGAATCTCCGACTCTGAGGACTTGGCTAAT
GGTTAATACTTAA
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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_022350 unedited
CTGTCAGGATTTTGTAAACACGACTCACTATGGNNGCGGCCGCGCAATTCGGCACGAGGG
TCAAATCTGCAGCAGCATGATTTAAGATTAATTCATGTATTGAAAAATTTGTTCCAGACC
CCATGTGACATAACTGGAGCCAGTGCAGTGCCATGAAGAACTACGAGATTAGCCTGGATA
TTAACTTGTCTTCTAGAGAATAGATTTTCATGTTCCATTCTTCTGCAATGGTTAATTCACA
CAGAAAACCAATGTTTAAACATTCACAGAGGATTTTACTGCTTAAACAGCCATCTTGCCCA
AATATGCATTTGTTCTCAGTTCTCAGTGCCATCTAGTTATCACTTCACTGAGGATCCTGG
GGCTTTCCAGTAGCCACTAATGGGAACGATTTCCCTTGGCAGGAGCTAAGGCTCCCCAG
TGTGGTCAATTCCTCTCCATTATGACCTCTTTGTCCACCCCAATCTCACCTCTCTGGACTT
TGTTCATCTGAGAAGAGCGAAGTCTTGGTCAGCAATGCTACCCAGTTTATCATCTTGCA
CAGCAAAGATCTTGAAATCACGAATGCCACCCTTCAGTCAGAGGAAGATTCAAGATACAT
GAAACCAGGAAAAGAACTGAAAGTTTTGAGTTACCCTGCTCATGAACAAATTCAGCTGCT
GGTTCAGAGAACTTACGCCTCACCTGAGATACTATGTGGCTATGGACTCCAAGCCAA
GTTAGGTGATGGCTATGAAGGGTNTATAAAAAGCACATACAGAACTCTTGGTGGTGAAC
AAGAAGTCTTGCAAGTAAACAGATTTTGGCCAAACCCAGNCACGCATGGCTATCCCTTGCTT
TGATGAACGTGTGTTCAAGCCTACTTTTTCATCAAGAACTAAGAGAGAGCAGGCATATGCA
CTATCCACATGCCTAAGGTCAGACGATGAAC
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3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_022350 unedited
CGCAATCTAGAATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT
TTTTTTTTTGAACAAAGTCTCGCTCAGTCACCCAAGCTGGAATGCAGTGGGCAATCTC
GGCTCACTGGAAGCTCCACCTCCCGGGTTTATGCCATTTTCTGCTGCAGCCTGCCGAGT
AGCTGGGACTACAGGCACCTGCCACCATGCCCGGTAATTTTTGTATTCTAACGGAGA
CGGGGTCTCACCGTGTTAACCAAGAAGGGCTCCATCTCCTGACCTCGGGATCCGCCCTTC
TCAACCTCCCAAAGTGTGGGATTACAGGCGTGAGCCACCGCGCCAGCCTACTTTTTCT
ATTGACATTTAAGTATTAACCATAGCCAAGTCTCAAAGTCCGGAAGATTCTTCTCCAG
CCATTTTATATTTTTGGGTATCGTTTTCCAGAACAGTTTGAAAAATATCCAGATGTGATCC
TTGAGCCTCAAGAGATTCAAAAATAGTTTCACCTCTTGCAACTATCCTTGAAGAAAA
GTGAGCTGTTGTGCCAGAGATGATCATCCTTATGTCATATGAGCCCAAGTCAAATTTTTT
CAGAAGATGGGTCCAATTTTCTTTAAAAATCCCATGCTAGTTGCTGCCCCCTTGACGT
CTGGCCATCGCATGAAAGAGAGCTGCCAAGCTCTGTGCCTTGAAACCCTTCCCTCCATCC
CTAGTCATTAACCTCATAACCTTTCCCTGAGCTAGCTCGTTGAAAAGATACAGAATTTGT
TTTGTCCACTGAACATGACAGTCAATAGCTCTAAAAGGNATTCCTCCTGCTGTGTCTG
AGCCCCAAGATAACAATCTTAAAAATCCGTGGTATATAAATTTCCCTGATCCATCCCTGG
AAAAAGTTCACACTTCTGGATGCAGAGCATGTTCAAGTACAGCACCTTAGAACCGACGGA
ATCTGTCCAATGAACCTGGACTCACCTTC
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Restriction Sites:

NotI-NotI

ACCN:

NM_022350

Insert Size:

3510 bp

OTI Disclaimer: 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.

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](#)

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_022350.1](#), [NP_071745.1](#)

RefSeq Size: 3356 bp

RefSeq ORF: 2883 bp

Locus ID: 64167

UniProt ID: [Q6P179](#)

Cytogenetics: 5q15

Domains: Peptidase_M1

Protein Families: Druggable Genome, Protease

Gene Summary:

This gene encodes a zinc metalloaminopeptidase of the M1 protease family that resides in the endoplasmic reticulum and functions in N-terminal trimming antigenic epitopes for presentation by major histocompatibility complex (MHC) class I molecules. Certain mutations in this gene are associated with the inflammatory arthritis syndrome ankylosing spondylitis and pre-eclampsia. This gene is located adjacent to a closely related aminopeptidase gene on chromosome 5. [provided by RefSeq, Jul 2016]

Transcript Variant: This variant (1) encodes the longest isoform (1). Variants 1 and 2 both encode the same protein (isoform 1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.