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Product datasheet for RC206441

AMCase (CHIA) (NM_021797) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AMCase (CHIA) (NM_021797) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AMCase
Synonyms:	AMCASE; CHIT2; TSA1902
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC206441 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTTTCTACTCCTGAGAACCGCCAGACTTTCATCACCTCAGTCATCAAATTCCTGCGCCAGTATGAGT
TTGACGGGCTGGACTTTGACTGGGAGTACCCTGGCTCTCGTGGGAGCCCTCCTCAGGACAAGCATCTCTT
CACTGTCCTGGTGCAGGAAATGCGTGAAGCTTTTGAGCAGGAGGCCAAGCAGATCAACAAGCCCAGGCTG
ATGGTCACTGCTGCAGTAGCTGCTGGCATCTCCAATATCCAGTCTGGCTATGAGATCCCCCAACTGTCAC
AGTACCTGGACTACATCCATGTCATGACCTACGACCTCCATGGCTCCTGGGAGGGCTACACTGGAGAGAA
CAGCCCCCTCTACAAATACCCGACTGACACCGGCAGCAACGCCTACCTCAATGTGGATTATGTCATGAAC
TACTGGAAGGACAATGGAGCACCAGCTGAGAAGCTCATCGTTGGATTCCCTACCTATGGACACAACTTCA
TCCTGAGCAACCCCTCCAACACTGGAATTGGTGCCCCCACCTCTGGTGCTGGTCCTGCTGGGCCCTATGC
CAAGGAGTCTGGGATCTGGGCTTACTACGAGATCTGTACCTTCCTGAAAAATGGAGCCACTCAGGGATGG
GATGCCCCTCAGGAAGTGCCTTATGCCTATCAGGGCAATGTGTGGGTTGGCTATGACAACATCAAGAGCT
TCGATATTAAGGCTCAATGGCTTAAGCACAACAAATTTGGAGGCGCCATGGTCTGGGCCATTGATCTGGA
TGACTTCACTGGCACTTTCTGCAACCAGGGCAAGTTTCCCCTAATCTCCACCCTGAAGAAGGCCCTCGGC
CTGCAGAGTGCAAGTTGCACGGCTCCAGCTCAGCCCATTGAGCCAATAACTGCTGCTCCCAGTGGCAGCG
GGAACGGGAGCGGGAGTAGCAGCTCTGGAGGCAGCTCGGGAGGCAGTGGATTCTGTGCTGTCAGAGCCAA
CGGCCTCTACCCCGTGGCAAATAACAGAAATGCCTTCTGGCACTGCGTGAATGGAGTCACGTACCAGCAG
AACTGCCAGGCCGGGCTTGTCTTCGACACCAGCTGTGATTGCTGCAACTGGGCA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC206441 protein sequence
Red=Cloning site Green=Tags(s)

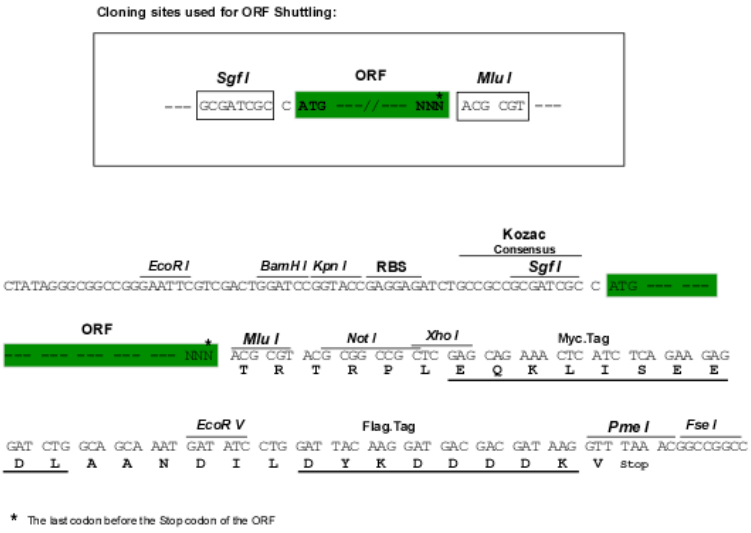
MVSTPENRQTFITSVIKFLRQYEFDGLDFDWEYPGSRGSPPQDKHLFTVLVQEMREAFEQEAKQINKPRL
MVTAAVAAGISNIQSGYEIPQLSQYLDYIHVMTYDLHGSWEGYTGENSPLYKYPTDTGSNAYLNVDYVMN
YWKDNGAPAEKLIVGFPTYGHNFILSNPSNTGIGAPTSGAGPAGPYAKESGIWAYYEICTFLKNGATQGW
DAPQEVPYAYQGNVWVGYDNIKSFDIKAQWLKHNKFGGAMVWAIDLDDFTGTFCNQGKFPLISTLKKALG
LQSASCTAPAQPIEPITAAPSGSGNGSGSSSSGGSSGGSGFCAVRANGLYPVANNRNAFWHCVNGVTYQQ
NCQAGLVFDTSCDCCNWA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6270_f06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021797

ORF Size: 1104 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_021797.4

RefSeq Size: 1414 bp

RefSeq ORF: 1107 bp

Locus ID: 27159

UniProt ID: Q9BZP6

Cytogenetics: 1p13.2

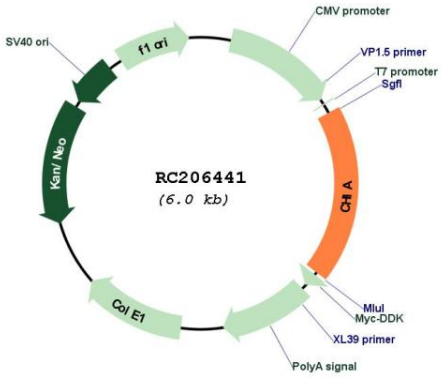
Protein Families: Secreted Protein

Protein Pathways: Amino sugar and nucleotide sugar metabolism

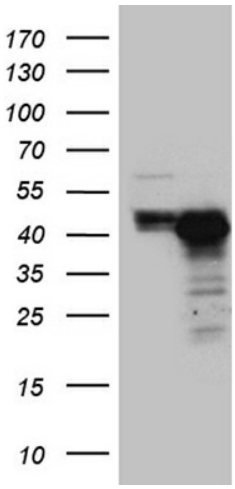
MW: 40.1 kDa

Gene Summary: The protein encoded by this gene degrades chitin, which is found in the cell wall of most fungi as well as in arthropods and some nematodes. The encoded protein can also stimulate interleukin 13 expression, and variations in this gene can lead to asthma susceptibility. Several transcript variants encoding a few different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]

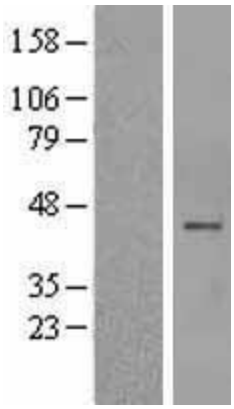
Product images:



Circular map for RC206441



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CHIA (Cat# RC206441, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CHIA (Cat# [TA811183])(1:2000). Positive lysates [LY411918] (100ug) and [LC411918] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY411918]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206441 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).