

Product datasheet for RC214256

Acrosin (ACR) (NM_001097) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Acrosin (ACR) (NM_001097) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: Acrosin
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC214256 representing NM_001097
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTTGAGATGCTACCAACTGCCATTCTGCTGGTCTTGGCAGTGTCCGTGGTTGCTAAAGATAACGCCA
CGTGTGATGGCCCTGTGGGTTACGGTTACGGCAAACCCACAGGGTGGTGTCCGCATCGTCGGCGGGAA
GGCTGCACAGCATGGGGCCTGGCCCTGGATGGTCAGCCTCCAGATCTTCACGTACAACAGCCACAGGTAC
CACACATGTGGAGGCAGCTTGTGAATTCACGATGGGTGCTCACTGCTGCTCACTGCTTCGTCGGCAAAA
ATAATGTGCATGACTGGAGACTGGTTTTTCGGAGCAAAGGAAATTACATATGGGAACAATAAACAGTAAA
GGCGCCTGTGCAAGAGAGATATGTGGAGAAAATCATCATTGAAAAATACAACCTCGCGACAGAGGGA
AATGACATTGCCCTCGTGGAGATCACCCCTCCATTTCGTGTGGGCGCTTCATTGGGCCGGGCTGCCTGC
CCCCTTGAAGGCAGGCCTCCCCAGAGGCTCCCAGAGCTGCTGGGTGGCCGGTGGGGATATATAGAAGA
GAAAGCCCCCAGGCCATCATCTATACTGATGGAGGCACGTGTGGATCTCATCGACCTGGACTTGTGTAAC
TCGACCCAGTGGTACAATGGGCGCTTCAGCCAACCAATGTGTGCGCGGGGTATCCTGTAGGCAAGATCG
ACACCTGCCAGGGAGACAGCGGGGGCCTCTCATGTGCAAAGACAGCAAGGAAAGCGCCTATGTGGTCGT
GGGAATCACAAGCTGGGGGTAGGCTGTGCCCGTGCCAAGCGCCCCGGAATCTACACGGCCACCTGGCCT
TATCTGAACTGGATCGCCTCCAAGATTGGTTCTAACGCTTTGCGTATGATTCAATCGGCCACCCCTCCAC
CGCCACCACTCGACCGCCCCGATTGACCCCTTCTCCACCTATCTCTGCTCACCTTCCTTGGTA
TTTCCAACCGCCCCCTCGACCACTTCCACCCCGACCACCGGCAGCCAGCCCGACCCCGACCCCTTACCC
CCGCCCCACCCCACTCCAGCCTCACCTTTACCCCAACCCCAACCCCAACCCCAACCCCACTACACCCTCAT
CTACCACAAAACCTCCCAAGGACTTTCTTTTGCCAAGCGCCTACAGCAGCTCATAGAGGCTTGAAGGG
GAAGACCTATCCGACGGAAAGAACCATTATGACATGGAGACCACAGAGCTCCGAAACTGACCTCGACC
TCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC214256 representing NM_001097
Red=Cloning site Green=Tags(s)

MVEMLPAILLVLAHSVVAKDNCATCDGPCGLRFRQNPQGGVRIVGGKAAQHGAWPMMVSLQIFTYNSHRY
 HTC GGSLLNSRWLTAACHFVGNKNNVHDWRLVFGAKEITYGNNKPVKAPVQERYVEKIIHEKYNSATEG
 NDIALVEITPPI SCGRF IGPGCLPHLKAGLPRGSQSCWVAGWGYIEEKAPRPSILMEARVDLIDLDCN
 STQWYNGRVQPTNVCAGYPVGKIDTCQGDSSGGLMCKDKSKEYVYVVGITSWGVCARAKRPGIYTATWP
 YLNWIASKIGSNALRMIQSATPPPPPTTRPPPIRPPF SHPISAHLPWYFQPPPRPLPPRPPAAQPRPPSP
 PPPPPPPASPLPPPPPPPTPSSTTKLPQGLSFAKRLQQLIEVLKGYSDGKNHYDMETTELPELTST
 S

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8005_g03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001097

ORF Size: 1263 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_001097.1](#), [NP_001088.1](#)

RefSeq Size: 1388 bp

RefSeq ORF: 1266 bp

Locus ID: 49

UniProt ID: [P10323](#)

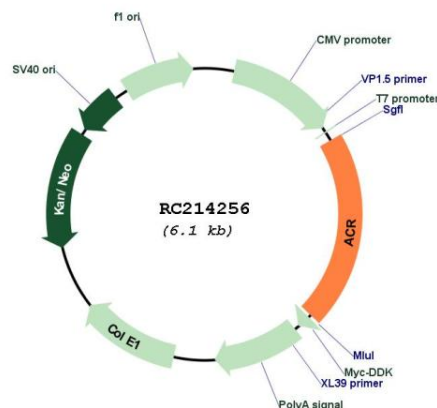
Cytogenetics: 22q13.33

Protein Families: Druggable Genome, Protease

MW: 45.8 kDa

Gene Summary: Acrosin is the major proteinase present in the acrosome of mature spermatozoa. It is a typical serine proteinase with trypsin-like specificity. It is stored in the acrosome in its precursor form, proacrosin. The active enzyme functions in the lysis of the zona pellucida, thus facilitating penetration of the sperm through the innermost glycoprotein layers of the ovum. The mRNA for proacrosin is synthesized only in the postmeiotic stages of spermatogenesis. In humans proacrosin first appears in the haploid spermatids. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC214256