

Product datasheet for RC206685

OriGene Technologies, Inc.

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Granzyme H (GZMH) (NM_033423) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Granzyme H (GZMH) (NM_033423) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: Granzyme H

Synonyms: CCP-X; CGL-2; CSP-C; CTLA1; CTSGL2

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC206685 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATGCAGCCATTCCTCCTGTTGGCCTTTCTTCTGACCCCTGGGGCTGGACAGAGGAGATCATCGGGG
GCCATGAGGCCAAGCCCCACTCCCGCCCCTACATGGCCTTTGTTCAGTTTCTGCAAGAGAAGAGTCGGAA
GAGGTGTGGCGGCATCCTAGTGAGAAAGGACTTTGTGCTGACAGCTGCTCACTGCCAGGGAAGCTCCATA
AATGTCACCTTGGGGGCCCACAATATCAAGGAACAGGAGCGGACCCAGCAGTTTATCCCTGTGAAAAGAC
CCATCCCCCATCCAGCCTATAATCCTAAGAACTTCTCCAACGACATCATGCTACTGCAGCTGGAGAGAAA
GGCCAAGTGGACCACAGCTGTGCGGCCTCTCAGGCTACCTAGCAGCAAGGCCCAGGTGAAGCCAGGGCAG
CTGTGCAGTGTGGCTGGCTGGGGTTATGTCTCAATGAGCACTTTAGCAACCACACTGCAGGAAGTTTG
TGACAGTGCAGAAGGACTGCCAGTGTGAACGTCTCTTCCATGGCAATTACAGCAGAGCCACTGAGATTTG
TGTGGGGGATCCAAAGAAGACACAGACCGGTTTCAAGAGGGCCCCCCGGGGGGCCCCTCGTGTGTAAGGAC
GTAGCCCAAGGTATTCTCTCCTATGGAAACAAAAAAAGGGACCCCTCCAGGAGTCTACATCAAGGTCTCAC
ACTTCCTGCCCTGGATAAAAGAAAAAAAAGGGACCCTCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC206685 protein sequence

Red=Cloning site Green=Tags(s)

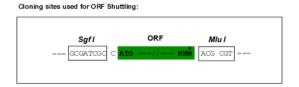
MQPFLLLLAFLLTPGAGTEEIIGGHEAKPHSRPYMAFVQFLQEKSRKRCGGILVRKDFVLTAAHCQGSSI NVTLGAHNIKEQERTQQFIPVKRPIPHPAYNPKNFSNDIMLLQLERKAKWTTAVRPLRLPSSKAQVKPGQ LCSVAGWGYVSMSTLATTLQEVLLTVQKDCQCERLFHGNYSRATEICVGDPKKTQTGFKGDSGGPLVCKD VAQGILSYGNKKGTPPGVYIKVSHFLPWIKRTMKRL

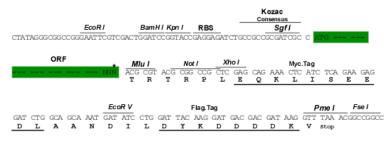
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6328 h07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_033423

ORF Size: 738 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: <u>NM 033423.5</u>

 RefSeq Size:
 987 bp

 RefSeq ORF:
 741 bp

 Locus ID:
 2999

 UniProt ID:
 P20718

 Cytogenetics:
 14q12

Protein Families: Druggable Genome, Protease

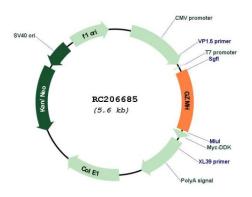
MW: 27.3 kDa

Gene Summary: This gene encodes a member of the peptidase S1 family of serine proteases. Alternative

splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate a chymotrypsin-like protease. This protein is reported to be constitutively expressed in the NK (natural killer) cells of the immune system and may play a role in the cytotoxic arm of the innate immune response by inducing target cell death and by directly cleaving substrates in pathogen-infected cells. This gene is present in a gene cluster with another member of the granzyme subfamily on chromosome 14.

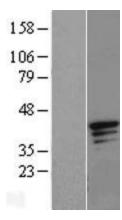
[provided by RefSeq, Nov 2015]

Product images:



Circular map for RC206685





Western blot validation of overexpression lysate (Cat# [LY409547]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206685 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).