

## Product datasheet for **SC321693**

### Granzyme B (GZMB) (NM\_004131) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Granzyme B (GZMB) (NM_004131) Human Untagged Clone
Tag:	Tag Free
Symbol:	Granzyme B
Synonyms:	C11; CCPI; CGL-1; CGL1; CSP-B; CSPB; CTLA1; CTSL1; HLP; SECT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM\_004131.3  
CCAGGGCAGCCTTCTGAGAAGATGCAACCAATCCTGCTTCTGCTGGCCTTCTCCTGCT  
GCCAGGGCAGATGCAGGGGAGATCATCGGGGGACATGAGGCCAAGCCCACTCCCGCC  
CTACATGGCTTATCTTATGATCTGGGATCAGAAGTCTCTGAAGAGGTGCGGTGGCTTCT  
GATACAAGACGACTTCGTGCTGACAGCTGCTCACTGTTGGGAAGCTCCATAAATGTCAC  
CTTGGGGGCCACAATATCAAAGAACAGGAGCCGACCCAGCAGTTTATCCCTGTGAAAAG  
ACCCATCCCCATCCAGCCTATAATCCTAAGAATTCTCCAACGACATCATGCTACTGCA  
GCTGGAGAGAAAGGCCAAGCGGACCAGAGCTGTGCAGCCCTCAGGCTACCTAGCAACAA  
GGCCAGGTGAAGCCAGGGCAGACATGCAGTGTGGCCGGTGGGGCAGACGGCCCCCT  
GGGAAAACACTCACACACTACAAGAGGTGAAGATGACAGTGCAGGAAGATCGAAAGTG  
CGAATCTGACTTACGCCATTATTACGACAGTACCATTGAGTTGTGCGTGGGGACCCAGA  
GATTA AAAAGACTTCTTTAAGGGGACTCTGGAGCCCTCTTGTGTGTAACAAGGTGGC  
CCAGGGCATTGTCTCCTATGGACGAAAACAATGGCATGCCTCCACGAGCCTGCACCAAAGT  
CTCAAGCTTTGTACTGGATAAAGAAAACCATGAAACGCCACTAACTACAGGAAGCAAA  
CTAAGCCCCCGTGTGATGAAACACCTTCTCTGGAGCCAAGTCCAGATTTACTGGGAG  
AGGTGCCAGCAACTGAATAAATACCTCTTAGCTGAGTGGAAAAAAAAAAAAAAAAAAAA  
AAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM\_004131

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).



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<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
<b>RefSeq:</b>	<a href="#">NM_004131.3</a> , <a href="#">NP_004122.1</a>
<b>RefSeq Size:</b>	955 bp
<b>RefSeq ORF:</b>	744 bp
<b>Locus ID:</b>	3002
<b>UniProt ID:</b>	<a href="#">P10144</a>
<b>Cytogenetics:</b>	14q12
<b>Domains:</b>	Tryp_SPc
<b>Protein Families:</b>	Druggable Genome, Protease
<b>Protein Pathways:</b>	Allograft rejection, Autoimmune thyroid disease, Graft-versus-host disease, Natural killer cell mediated cytotoxicity, Type I diabetes mellitus
<b>Gene Summary:</b>	<p>This gene encodes a member of the granzyme subfamily of proteins, part of the peptidase S1 family of serine proteases. The encoded preproprotein is secreted by natural killer (NK) cells and cytotoxic T lymphocytes (CTLs) and proteolytically processed to generate the active protease, which induces target cell apoptosis. This protein also processes cytokines and degrades extracellular matrix proteins, and these roles are implicated in chronic inflammation and wound healing. Expression of this gene may be elevated in human patients with cardiac fibrosis. [provided by RefSeq, Sep 2016]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1).</p>