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Product datasheet for RG202678

Elastase (CELA3B) (NM_007352) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Elastase (CELA3B) (NM_007352) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Elastase
Synonyms:	CBPP; ELA3B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG202678 representing NM_007352
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGCTCCGGCTGCTCAGTTCCCTCCTCCTTGTGGCCGTTGCCTCAGGCTATGGCCCACCTTCCTCTC
GCCCTTCCAGCCGCGTTGTCAATGGTGAGGATGCGGTCCCCTACAGCTGGCCCTGGCAGGTTTCCCTGCA
GTATGAGAAAAGTGGAAGCTTCTACCACACGTGTGGCGGTAGCCTCATCGCCCCCGACTGGGTTGTGACT
GCCGGCCACTGCATCTCGAGCTCCTGGACCTACCAGGTGGTGTTGGGCGAGTACGACCGTGCTGTGAAGG
AGGGCCCCGAGCAGGTGATCCCCATCAACTCTGGGGACCTCTTTGTGCATCCACTCTGGAACCGCTCGTG
TGTGGCCTGTGGCAATGACATCGCCCTCATCAAGCTCTCACGCAGCGCCCAGCTGGGAGACGCCGTCCAG
CTCGCCTCACTCCCTCCCGCTGGTGACATCCTTCCCAACGAGACACCCTGCTACATCACCGGCTGGGGCC
GTCTCTATACCAACGGGCCACTCCCAGACAAGCTGCAGGAGGCCCTGCTGCCCGTGGTGGACTATGAACA
CTGCTCCAGGTGGAACTGGTGGGGTTCCTCCGTGAAGAAGACCATGGTGTGTGCTGGAGGGGACATCCGC
TCCGGCTGCAACGGTGACTCTGGAGGACCCCTCAACTGCCCCACAGAGGATGGTGGCTGGCAGGTCCATG
GCGTGACCAGCTTTGTTTCTGCCTTTGGCTGCAACACCCGCAGGAAGCCCACGGTGTTCACTCGAGTCTC
CGCCTTCATCGACTGGATTGAGGAGACCATAGCAAGCCAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

View online »

Protein Sequence:

>RG202678 representing NM_007352
Red=Cloning site Green=Tags(s)

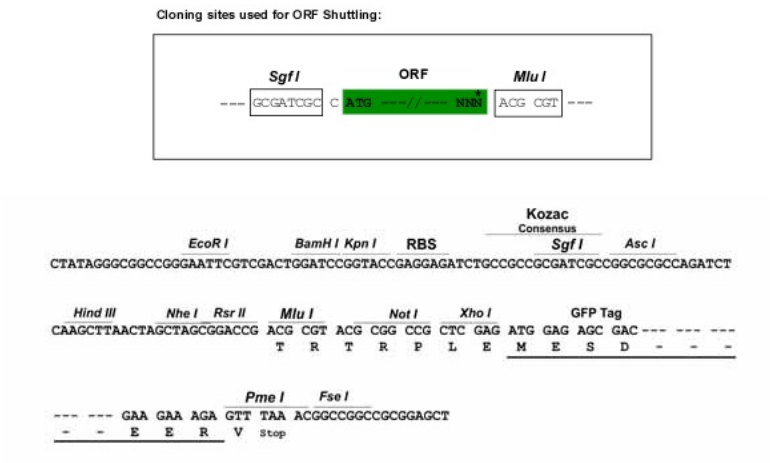
MMLRLLSSLLLVAVASGYGPPSSRPSSRVVNGEDAVPYSWPWQVSLQYEKSGSFYHTCGGSLIAPDWVVT
AGHCISSSWTYQVVLGEYDRAVKEGPEQVIPINSGDLFVHPLWNRSCVACGNDIALIKLSRSAQLGDAVQ
LASLPPAGDILPNETPCYITGWGRLYTNGPLPDKLQEALLPVVDYEHCSRWNWWGSSVKKTMVCAGGDIR
SGCNGDSGGPLNCPTEDGGWQVHGVTSFVSAFGCNTRRKPTVFTRVSAFIDWIEETIASH

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_007352

ORF Size: 810 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_007352.2, NP_031378.1

RefSeq Size: 1055 bp

RefSeq ORF: 813 bp

Locus ID: 23436

UniProt ID: P08861

Cytogenetics: 1p36.12

Protein Families: Druggable Genome, Protease

Gene Summary: Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode the structurally similar proteins elastase 1, 2, 2A, 2B, 3A, and 3B. Unlike other elastases, elastase 3B has little elastolytic activity. Like most of the human elastases, elastase 3B is secreted from the pancreas as a zymogen and, like other serine proteases such as trypsin, chymotrypsin and kallikrein, it has a digestive function in the intestine. Elastase 3B preferentially cleaves proteins after alanine residues. Elastase 3B may also function in the intestinal transport and metabolism of cholesterol. Both elastase 3A and elastase 3B have been referred to as protease E and as elastase 1, and excretion of this protein in fecal material is frequently used as a measure of pancreatic function in clinical assays. [provided by RefSeq, May 2009]

Product images:

Circular map for RG202678