

Product datasheet for **MG226927**

Capn8 (NM_130890) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Capn8 (NM_130890) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Capn8
Synonyms:	nCL-2; nCL-2'
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**ORF Nucleotide
Sequence:**

>MG226927 representing NM_130890
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGC**

ATGGCAGCCCTGGCAGCTGGAATATCCAAGCAACGTGCAGCTGCTCAGGGCCTTGCTCTAACCAGAATG
 CTGTGAAGTATCTGGCCAGGACTTCGAGACCCTGAGAAAGCAATGCTTGAACCTCAGGGGTCTATTAA
 AGACCCGGAATCCCGCATGTCCGTCACTTTGGGCTACAGGGATCTTGACCAAGGCTCTGCAGAACT
 CAAGGCATCATATGGAAGCGACCCAGGAATTGTGTTCCAACCTCAGTTTATCGTTGGCGGAGCCACAC
 GCACAGACATCCGCCAGGGGGTCTTGAGACTGTTGGCTTCTGGCAGCCATTGCCTCCCTCACCTTGAA
 TGAAGAGCTGCTTATCGAGTGGTCTAGAGACCAGAGCTTCCAGAAGAACTATGCTGGCATTTCAT
 TTCCAGTTCTGGCAGTATGGAGAGTGGGTGGAGGTGGTCATTGATGACCGGCTCCCAACCAAGATGGAC
 AGCTGCTCTTCTACACTCCGAAGAAGGCAATGAGTTCTGGAGTCTCTGCTGGAGAAAGCTATGCCAA
 GCTCAATGGTTCTGATGAGGCTCTTGTGGAGGCTCCACAATTGAGGGGTTTGGAGTTTACGGGTGGC
 ATCTCTGAGTTTTATGACTTGAGGAAGCCTCCGGGCAATCTGTACTACACCATCCAGAAGGCCCTGCGCA
 AAGGCTCTCTGCTGGGCTGCTCCATTGATGTCTCAAACGCAGCCGAAGCAGAAGCCACCACAGGCAAAA
 GCTGGTTAAGGGCCACGCATACTCTGTGACTGGAGTCGAAGAGGTGGATTTCCGTGGCCTCCAGAGAAG
 CTGATCAGGTTGAGGAACCCGTGGGTGAAGTGGAGTGGACGGGAGCCTGGAGTGATAGTGCACCTGAGT
 GGAATTACATAGATCCACAGAAGAAGGGAGAAGTGGACAAGAGAGCAGAAGATGGGGAGTTCTGGATGTC
 CTTTTCGGATTTCTGAAGCAGTTCTCCGACTAGAGATATGCAACCTGTCCCAGACTCTCTGAGCAGT
 GAGGAGATACACAAATGGAACCTGGTACTCTTCAACGGCCGCTGGACACGGGTTCTACAGCCGGGGCT
 GCCAGAACTACCCAGCCACTTACTGGACCAACCCCAAGTTTAAATCCATTTGGACGAGGTGGATGAGGA
 CCAGGAGGAGGGCACCAGTGAACCTGCTGTACAGTGTCTGGGTCTGATGCAGAAGAATCGCAGACGT
 CAGAGGAGGATCGGCCAGGGCATGCTCAGCATAGGCTATGCTGTCTACCAGATTCCCAAGGAGCTGGAGA
 ATCACACCGATGAGCACCTGGGCCGGGATTTCTTCCAGGGCCGCCAGCCCTCCACCTGCTCCAGCACCTA
 CATGAACCTTCGAGAGGTGTCCAGCAGGGTCCAACCTCCCCCAGGACAGTACCTGGTGGTGCCATCCACC
 TTTGAGCCCTTCAAGGACGGTGACTTCTGCCTGAGGGTGTCTCGGAGAAGAAGGCCAGGCTCTAGAAA
 TTGGGGACGCTGTTGCTGGAGACCCACATGAGCCACATCCCGTGACATGGATGGAGAAGATGAGCACTT
 CTGGAGCCTGTCTGAGGAGTTTGCAGACAAGATTCTGAAATCAGTGCTCACCAGCTCAAGAGGGTCTG
 AATGGATTGCTTTCTAACGAACAGACATGAAATTTGACGGATTCAACATCAACACTTGCAGAGAAATGA
 TCAGCCTGCTGGATGGTATGGGACAGGAAGCCTGCGACCGGTGGAGTTCAAGACTCTCTGGCTGAAGAT
 CTGCAAGTATCTGGAGATCTACCAAGAAATGGACCACAGCCGTGCAGGGACCATTTGATGCTCAGGATG
 AGGACAGCTCTCAAGAAAGCAGGTTTACCCTCAACAACCAGGTGCAGCAGACCATTTGCCACGAGGTATG
 CATGCAGCAAGCTTGGTGTGACTTTGACGGCTTTGTGGCTTGTATGATCCGCCTGGAGATCCTGTTCAA
 ATTGTTACAGACTCTTGATAAGGACCAGAATGGCATTGTACAGCTCTCCCTGGCTGAGTGGCTGTGCTGT
 GCACTGGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG226927 representing NM_130890
 Red=Cloning site Green=Tags(s)

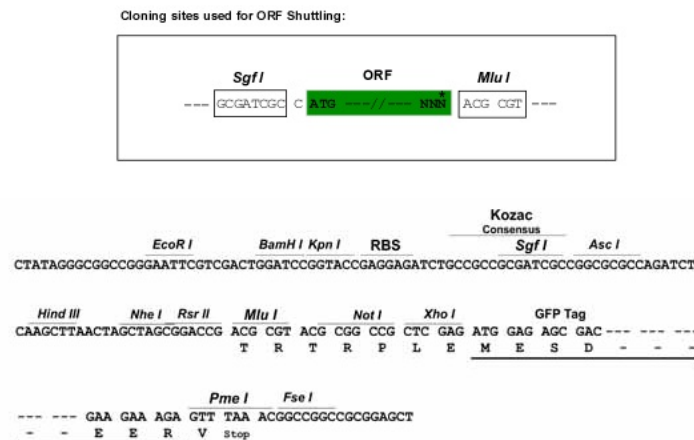
MAALAAGISKQRAAAQGLGSNQNAVKYLGQDFETLRKQCLNSGVLFKDPEFPACPSALGYRDLGPGSAET
 QGIWKRPTELCSNPQFIVGGATRTDIRQGGLGDCWLLAAIASLTLNEKLLYRVVPRDQSFQKNYAGIFH
 FQFWQYGEWVEVIDDLPTKNGQLFLHSEEGNEFWSSALLEKAYAKLNGSYEALAGGSTIEGFEDFTGG
 ISEFYDLRKPPGNLYYTIQKALRKGSLLGCSIDVSNAEAEATTRQKLKKGHAYSVTGVEEVDFRGLPEK
 LIRLRNPWGEVEWTGAWSDSAPEWNYIDPQKKGELDKRAEDGEFWSFSDFLKQFSRLEICNLSPDSLSS
 EEIHKWNLVLFNGRWTRGSTAGGCQNPATYWTNPQFKIHLDEVDEDQEEGTSEPCTVLLGLMQKNRRR
 QRRIGQGMLSIGYAVYQIPKELENHTDEHLGRDFFQGRQPSTCSSTYMNLREVSSRVQLPPGQYLVVPS
 FEPFKDGFCLRVFSEKKAQALEIGDAVAGDPHEPHPRMDGEDEHFWLSSEFADKDSEISAHQLKRVL
 NGLLSKRTDMKFDGFNINTCREMISLLDGDGTSLRPVEFKTLWLKICKYLEIYQEMDHSRAGTIDAHEM
 RTALKKAGFTLNNQVQQTATRYACSKLGVDFDGFVACMIRLEILFKLFRLLDKDQNGIVQLSLAEWLCC
 ALV

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_130890

ORF Size: 2109 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_130890.2](#), [NP_570960.2](#)

RefSeq Size: 2411 bp

RefSeq ORF: 2112 bp

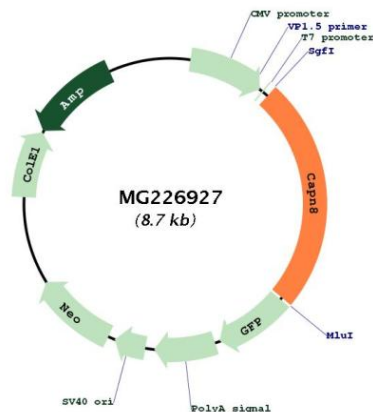
Locus ID: 170725

UniProt ID: [Q91VA3](#)

Cytogenetics: 1 H5

Gene Summary: Calcium-regulated non-lysosomal thiol-protease (By similarity). Involved in membrane trafficking in the gastric surface mucus cells (pit cells) and may involve the membrane trafficking of mucus cells via interactions with coat protein. Proteolytically cleaves the beta-subunit of coatomer complex.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG226927