

Product datasheet for **MG227323**

Cttn (NM_007803) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cttn (NM_007803) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cttn
Synonyms:	1110020L01Rik; Ems1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG227323 representing NM_007803
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTGAAAGCCTCTGCAGGCCATGCTGTGTCCATCACGCAGGATGATGGAGAGCTGATGACTGGGAGA
 CTGATCCCTGATTTTGTGAATGATGTGAGTGAAAAGGAGCAGAGATGGGGTCTAAAACCGTCAGGGATC
 GGGCACCAGGAACACATCAACATTCACAAGCTTCGAGAGAATGTCTTCCAAGAACCAGACGCTCAAG
 GAGAAGGAGCTGGAAACGGGACCAAGGCTTCCCACGGCTATGGCGGAAGTTCGGTGTGGAGCAGGATA
 GGATGGACAGATCAGCCGTGGGCCATGAGTACCAGTCAAGCTTTCGAAGCACTGCTCACAAGTGGACTC
 GGTCCGGGGCTTCGGAGGCAAGTTCGGTGTCCAGATGGACAGGGTGGATCAGTCTGCTGTAGGCTTTGAA
 TACCAGGGGAAGACTGAGAAGCATGCCTCCCAGAAAGACTACTCTAGTGGCTTCGGTGGCAAATACGGTG
 TGCAAGCTGACCGTGTAGACAAGAGTCCCGTGGGCTTTGACTACCAGGGCAAGACGGAGAAGCATGAGTC
 TCAGAAAGATTACTCAAAGTTTTGGTGGCAAATATGGGATTGACAAGGACAAGGTGGATAAAAGTGCT
 GTGGGCTTTGAGTATCAAGGCAAGACAGAGAAGCACGAATCCCAGAAAGACTATGTAAAAGGCTTTGGAG
 GAAAGTTTGGTGTGCAGACAGACAGACAGGACAAGTGTGCCCTTGGCTGGGACCATCAGGAGAAGCTGCA
 GCTGCATGAATCCAAAAAGACTATAAGACTGGTTTTCGGAGGCAAATTTGGTGTTCAGTCCGAGAGGCAG
 GACTCCTCCGCTGTGGGTTTTGATTACAAGGAGAGATTGGCCAAGCACGAGTCCCAGCAAGACTATGCCA
 AAGGATTCGGCGGGAAGTATGGGGTGCAGAAGGATCGGATGGACAAGAATGCATCCACCTTTGAAGAAGT
 GGTCCAGGTGCCATCTGCCTATCAGAAGACTGTCCCCATTGAGGCCGTAACCAGCAAAACCGTAATATC
 CGTGCTAACTTTGAAAACCTGGCAAAGGAGAGAGAGCAGGAGGACAGGCGGAAGCAGAAGCCGAGAGAG
 CTCAGCGGATGGCCAAAGAAAGACAGGAGCAGGAGGAGGCGCAGGAAGCTGGAAGAGCAAGCCAGAGGC
 CAAGAAGCAGACGCCCTGCATCCCCTAGTCCTCAACCAATTGAAGACAGACCCTCCAGCCCCATC
 TATGAGGATGCAGCTCCGTTCAAGGCCGAGCCGAGCTACCGAGGTAGCGAACCTGAGCCTGAGTACAGCA
 TCGAGGCCGAGGCATTCTGAGGCTGGCAGCCAGCAAGGCCGACTATACATCAGAGCCCGTGTACGA
 GACTACAGAGGCTCCTGGCCACTATCAAGCAGAGGATGACACCTACGATGGGTATGAGAGTGACCTGGGC
 ATCACAGCCATCGCCCTGTATGACTACCAGGCTGCTGGCGATGATGAGATCTCCTTTGACCTGATGACA
 TCATCACCAACATAGAAATGATTGACGATGGCTGGTGGCGTGGGGTGTGCAAGGGCAGATACGGGCTCTT
 CCCAGCCAACATGTGGAGCTCGGCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG227323 representing NM_007803
 Red=Cloning site Green=Tags(s)

MWKASAGHAVSITQDDGGADDWETDPDFVNDVSEKEQRWGAKTVQSGHQEHINIHKLRENVFQEQTLK
 EKELETGPKASHYGGKFGVEQDRMDRSVGHHEYQSKLSKHCSQVDSVRFGGKFGVQMDRVDQSAVGFE
 YQGKTEKHASQKDYSSFGGKYGVQADRVDKSAVGFQYQKTEKHESQKDYSGFGGKYGIDKDKVDKSA
 VGFYQGKTEKHESQKDYVKGFGKFGVQTDQRQDKCALGWDHQEKLQLHESQKDYKTFGGKFGVQSERQ
 DSSAVGFQYKERLAKHESQDYAKFGGKYGVQKDRMDKNASTFEEVVQVPSAYQKTPVIEAVTSKTSNI
 RANFENLAKEREQEDRRKAEAEARAQMAKERQEAEARRKLEEQARAKKQTPPASPPQPIEDRPPSSPI
 YEDAAPFKAEPSYRGSEPEPEYSIEAAGIPEAGSQQLTYTSEPVEYETTEAPGHYQAEDDTYDGYESDLG
 ITAIALYDYQAAGDDEISFDPDDIITNIEMIDDGWWRGVCKGRYGLFPANYVELRQ

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

ACCN:	NM_007803
ORF Size:	1638 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:	<ol style="list-style-type: none">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_007803.5 , NP_031829.2
RefSeq Size:	3029 bp
RefSeq ORF:	1641 bp
Locus ID:	13043
UniProt ID:	Q60598
Cytogenetics:	7 F5
Gene Summary:	Contributes to the organization of the actin cytoskeleton and cell shape (PubMed:17403031). Plays a role in the formation of lamellipodia and in cell migration (By similarity). Plays a role in the regulation of neuron morphology, axon growth and formation of neuronal growth cones (By similarity). Through its interaction with CTTNBP2, involved in the regulation of neuronal spine density (PubMed:22262902). Plays a role in the invasiveness of cancer cells, and the formation of metastases (By similarity). Plays a role in focal adhesion assembly and turnover (By similarity). In complex with ABL1 and MYLK regulates cortical actin-based cytoskeletal rearrangement critical to sphingosine 1-phosphate (S1P)-mediated endothelial cell (EC) barrier enhancement (By similarity). Plays a role in intracellular protein transport and endocytosis, and in modulating the levels of potassium channels present at the cell membrane (PubMed:17959782). Plays a role in receptor-mediated endocytosis via clathrin-coated pits (By similarity). Required for stabilization of KCNH1 channels at the cell membrane (By similarity).[UniProtKB/Swiss-Prot Function]