

## Product datasheet for **RC215171**

### Calpain 9 (CAPN9) (NM\_006615) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Calpain 9 (CAPN9) (NM_006615) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Calpain 9
Synonyms:	GC36; nCL-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC215171 representing NM\_006615  
 Red=Cloning site Blue=ORF Green=Tags(s)

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**Protein Sequence:** >RC215171 representing NM\_006615  
 Red=Cloning site Green=Tags(s)

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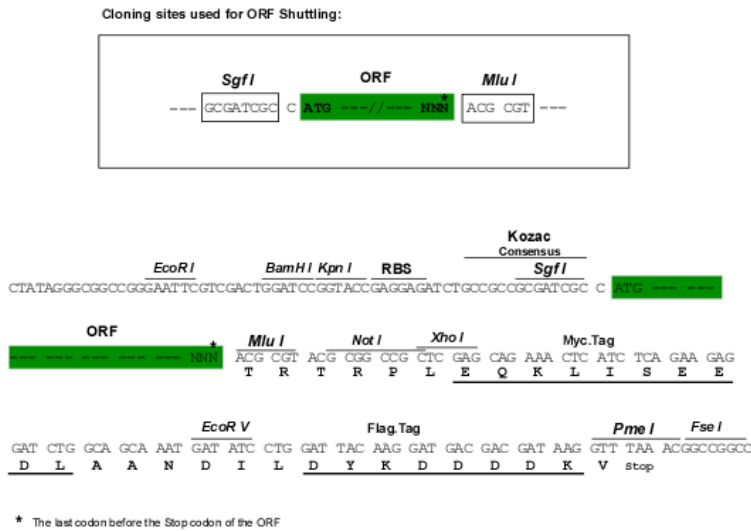
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**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6112\\_c04.zip](https://cdn.origene.com/chromatograms/mk6112_c04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_006615

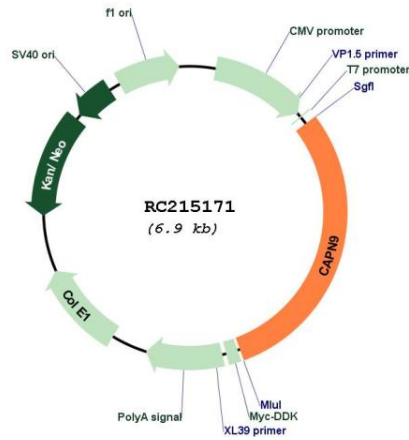
**ORF Size:** 2070 bp

**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](#)

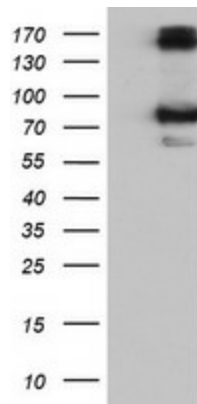
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<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_006615.3</a>
<b>RefSeq Size:</b>	2362 bp
<b>RefSeq ORF:</b>	2073 bp
<b>Locus ID:</b>	10753
<b>UniProt ID:</b>	<a href="#">O14815</a>
<b>Cytogenetics:</b>	1q42.2
<b>Domains:</b>	Calpain_III, EFh
<b>Protein Families:</b>	Druggable Genome, Protease
<b>MW:</b>	78.9 kDa
<b>Gene Summary:</b>	Calpains are ubiquitous, well-conserved family of calcium-dependent, cysteine proteases. The calpain proteins are heterodimers consisting of an invariant small subunit and variable large subunits. The large subunit possesses a cysteine protease domain, and both subunits possess calcium-binding domains. Calpains have been implicated in neurodegenerative processes, as their activation can be triggered by calcium influx and oxidative stress. The protein encoded by this gene is expressed predominantly in stomach and small intestine and may have specialized functions in the digestive tract. This gene is thought to be associated with gastric cancer. Multiple alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

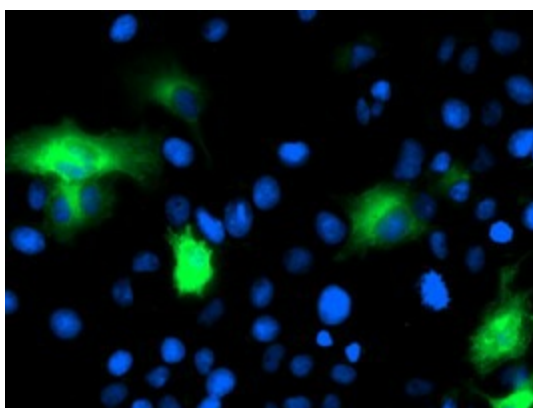
Product images:



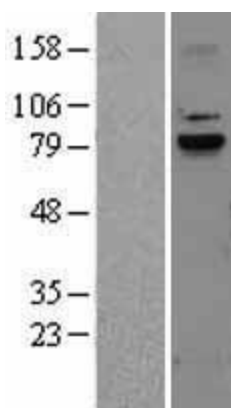
Circular map for RC215171



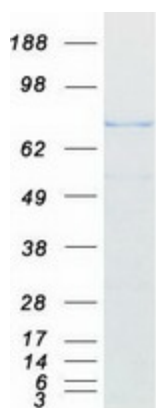
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY CAPN9 (Cat# RC215171, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-CAPN9 (Cat# [TA503774]). Positive lysates [LY401979] (100ug) and [LC401979] (20ug) can be purchased separately from OriGene.



Anti-CAPN9 mouse monoclonal antibody ([TA503774]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY CAPN9 (RC215171).



Western blot validation of overexpression lysate (Cat# [LY401979]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215171 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CAPN9 protein (Cat# [TP315171]). The protein was produced from HEK293T cells transfected with CAPN9 cDNA clone (Cat# RC215171) using MegaTran 2.0 (Cat# [TT210002]).