

## Product datasheet

# Native human Calpain 1 protein (Active) ab91019

★★★★★ [1 Abreviews](#) [4 References](#) [2 Images](#)

### Description

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<b>Product name</b>	Native human Calpain 1 protein (Active)
<b>Biological activity</b>	<p>&gt;=1,000 units per mg protein.</p> <p>One unit is defined as the amount of enzyme that hydrolyzes one picomole of Suc-LLVY-AMC per minute at 25degC.</p>
<b>Purity</b>	> 95 % SDS-PAGE.
<b>Expression system</b>	Native
<b>Accession</b>	<b><u>P07384</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Native
<b>Species</b>	Human
<b>Predicted molecular weight</b>	110 kDa

### Specifications

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Our **Abpromise guarantee** covers the use of **ab91019** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

<b>Applications</b>	Western blot Functional Studies SDS-PAGE
<b>Form</b>	Liquid
<b>Additional notes</b>	<p>Prepared from whole blood shown to be non-reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 &amp; 2 by FDA approved tests.</p> <p>Protein determination: Bradford Assay.</p>

### Preparation and Storage

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<b>Stability and Storage</b>	<p>Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.</p> <p>pH: 6.80</p>
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Preservative: 0.14% Imidazole

Constituents: 0.038% EGTA, 0.039% Beta mercaptoethanol, 0.0292% EDTA, 30% Glycerol

This product is an active protein and may elicit a biological response in vivo, handle with caution.

## General Info

### Function

Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.

### Tissue specificity

Ubiquitous.

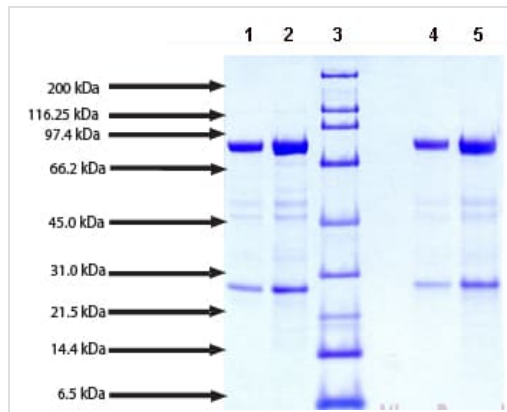
### Sequence similarities

Belongs to the peptidase C2 family.  
Contains 1 calpain catalytic domain.  
Contains 4 EF-hand domains.

### Cellular localization

Cytoplasm. Cell membrane. Translocates to the plasma membrane upon Ca(2+) binding.

## Images



SDS-PAGE - Native human Calpain 1 protein  
(ab91019)

SDS-PAGE: 4-12% Bis-Tris NuPAGE gel

Lane 1: 5 µg ab91019 (reduced /heated).

Lane 2: 10 µg ab91019 (reduced/ heated).

Lane 3: Molecular weight markers.

Lane 4: 5 µg ab91019 (non-reduced/no heat).

Lane 5: 10 µg ab91019 (non-reduced/no heat).



Western blot - Native human Calpain 1 protein  
(ab91019)

Anti-Calpain 1 antibody ([ab2543](#)) at 1 µg/ml + Native human Calpain 1 protein (Active) (ab91019) at 0.01 µg

### Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Exposure time:** 10 seconds

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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