

## Calpain Assay Kit and Reagents

Calpains are calcium-dependent enzymes that determine the fate of proteins through regulated proteolytic activity. In humans, at least 14 mammalian calpains have been identified. Some calpain proteases are confined to specific tissues, whereas others are ubiquitous. Tissue-specific calpains have been implicated in diabetes, cataracts, multiple sclerosis, cancer, Duchenne's muscular dystrophy, and Alzheimer's disease (AD) and are known to cause autosomal recessive limb-girdle muscular dystrophy type 2A (LGMD2A). Recently, it has been found that calpain mediates the effects of brain-derived neurotrophic factor (BDNF) and thus may play a major role in learning and memory. In addition, calpains play active roles in cell motility, cell cycle progression, regulation of clotting and diameter of blood vessels, apoptosis, and are an essential component of necrosis. BioVision is proud to offer several key products (see below) for researchers pursuing research in the area of Calpains.

### Assay Kit

Name	Cat. #
Calpain Activity Assay Kit	K240-100

### Enzyme/Substrate

Name	Cat. #
Active Human Calpain 1	1134-100
Suc-Leu-Leu-Val-Tyr-AMC	1833-5

### Antibodies

Name	Cat. #
Calpain 1 Antibody	3189-100
Calpain 1 Blocking Peptide	3189BP-50
Calpain 2 Antibody	3372-100
Calpain 1 Blocking Peptide	3372BP-50

### Inhibitors

Name	Cat. #
Calpain Inhibitor I, ALLN	1834-5, 25
Calpain Inhibitor II, ALLM	1835-5, 25
Calpain Inhibitor Z-LLY-FMK	1125-20C
PD 150, 606	1906-5, 25

