

Calpain Activity Assay Kit ab65308

★★★★★ 1 Abreviews 74 References 3 图像

概述	
产品名称	Calpain Activity Assay试剂盒
检测方法	Fluorescent
样品类型	Tissue Extracts, Cell Lysate
检测类型	Quantitative
检测时间	2h 00m
种属反应性	与反应: Mammals, Other species
产品概述	<p>Calpain Activity Assay Kit ab65308 provides optimized buffers and reagents for a convenient measurement of calpain activity.</p> <p>The extraction buffer included in the kit specifically extracts cytosolic proteins without contamination by cell membrane and lysosome proteases. It also prevents auto-activation of calpain during the extraction procedure. Thus, the kit detects only activated calpain within the cytosol.</p> <p>The calpain activity assay protocol is based on the detection of cleavage of calpain substrate Ac-LLY-AFC. Ac-LLY-AFC emits blue light ($\lambda_{\text{max}} = 400 \text{ nm}$); upon cleavage of the substrate by calpain, free AFC emits a yellow-green fluorescence ($\lambda_{\text{max}} = 505 \text{ nm}$), which can be quantified using a fluorometer or a fluorescence plate reader. Comparison of the fluorescence intensity from a treated sample with a normal control allows determination of the changes in calpain activity.</p> <p>Calpain activity assay protocol summary:</p> <ul style="list-style-type: none">- add samples and positive and negative controls to wells- add reaction buffer and calpain substrate- incubate for 60 min- analyze with a microplate reader
说明	<p>This product is manufactured by BioVision, an Abcam company and was previously called K240 Calpain Activity Fluorometric Assay Kit. K240-100 is the same size as the 100 test size of ab65308.</p> <p>If additional Ac-LLY-AFC substrate is needed, it can be purchased separately as ab171379.</p>
平台	Microplate reader

性能

存放说明 Store at -80°C. Please refer to protocols.

组件	100 tests
10X Reaction Buffer	1 x 1.5ml
Calpain I Positive Control	1 x 10µl
Calpain Inhibitor	1 x 10µl
Calpain Substrate	1 x 500µl
Extraction Buffer III	1 x 25ml

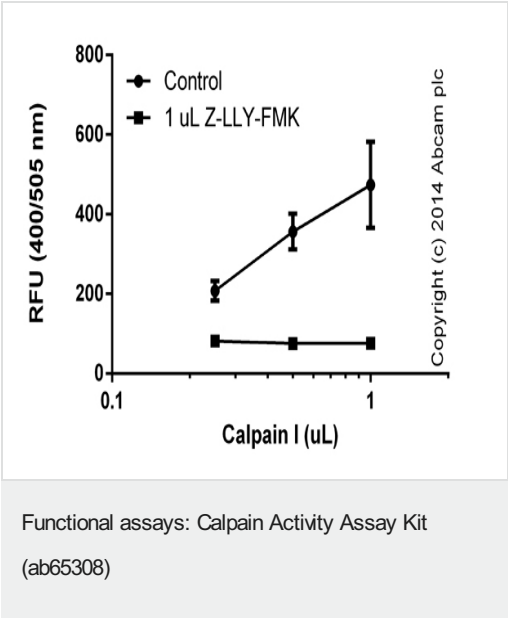
功能 Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.

组织特异性 Ubiquitous.

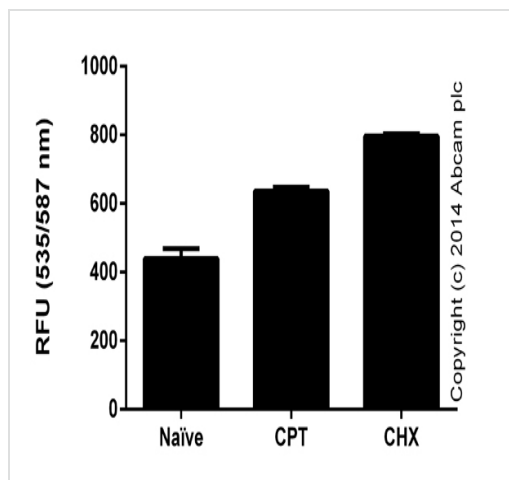
序列相似性 Belongs to the peptidase C2 family.
Contains 1 calpain catalytic domain.
Contains 4 EF-hand domains.

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

图片

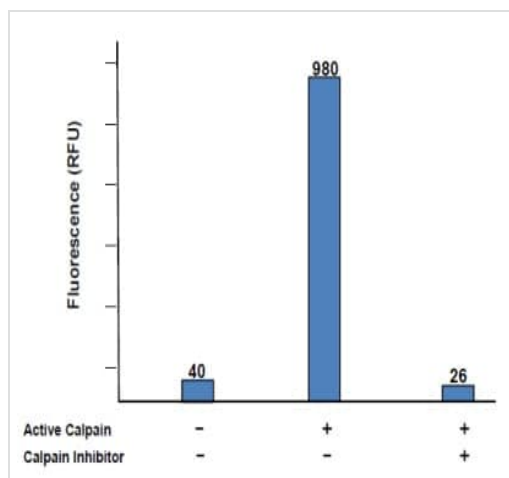


Different amounts of positive control (Calpain I) treated with 1 µL of inhibitor (Z-LLY-FMK), background signal subtracted, duplicates; +/- SD.



Functional assays: Calpain Activity Assay Kit
(ab65308)

10e7 Jurkat cells (in 10 mL) were cultured in the absence or presence of 10 μ M Camptothecin (CPT) ([ab120115](#)) or 10 μ g/mL Cycloheximide (CHX) ([ab120093](#)) for 4 hours. Pelleted cells were lysed in 0.5 mL of Extraction Buffer and tested directly. Background signal subtracted, duplicates; \pm SD.



Functional Studies - Calpain Activity Assay Kit
(ab65308)

Typical Data for ab65308: Active Calpain (1 μ g) was incubated at 37 $^{\circ}$ C for one hour using the Calpain Substrate with or without 20 μ M Calpain Inhibitor.

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