abcam

Product datasheet

Anti-Calpain small subunit 1 antibody ab28237

7 References 2 图像

概述

产品名称	Anti-Calpain small subunit 1抗体
描述	**兔多克隆抗体**to Calpain small subunit 1
宿主	Rabbit
特异性	ab28237 binds to calpain S-1, does not cross react with the other calpain family members (calpain S-2, calpain-1, calpain-2, calpain-3, etc.).
经测试应用	**适用于:** IHC-P, ICC/IF
种属反应性	**与反应:** Human
免疫原	Synthetic peptide corresponding to Human Calpain small subunit 1 (N terminal).
阳性对照	mouse brain tissue lysate
常规说明	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	Preservative: 0.05% Sodium azide Constituent: 50% Glycerol
纯度	Immunogen affinity purified
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab28237于以下的经测试应用**

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		
ICC/IF		

应用说明

ICC/IF: Use at a concentration of 1 µg/ml.
IHC-P: Use at a concentration of 1 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB: 1/1000 when using colorimetric substrates - 1/5000 for chemiluminescent substrates.
Predicted molecular weight: 30 kDa. Dilution optimised using Chromogenic detection. Not yet tested in other applications. Optimal dilutions/concentrations should be determined by the end user.

靶标

功能

Regulatory subunit of the calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.

序列相似性

Contains 5 EF-hand domains.

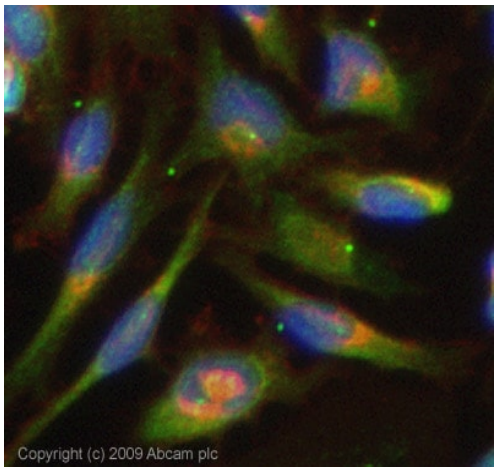
结构域

The contact of the 5th EF-hand domain from each monomer allows the formation of the homodimer and also appears to mediate the contact between the large catalytic subunit and small regulatory subunit for the formation of the heterodimer.
EF-hand domains are paired. EF-hand 1 is paired with EF-hand 2 and EF-hand 3 is paired with EF-hand 4. The fifth EF-hand domain, left unpaired, does not bind the calcium but is responsible of the dimerization by EF-embrace. The first four EF-hand domains bind calcium, however it is not sure if the binding of EF-hand 4 to calcium is physiologically relevant.

细胞定位

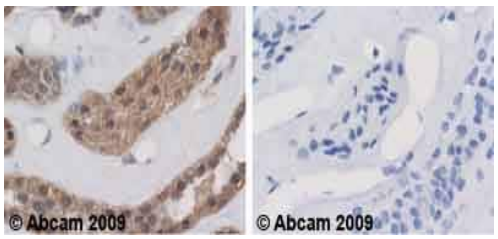
Cytoplasm. Cell membrane. Translocates to the plasma membrane upon calcium binding.

图片



Immunocytochemistry/ Immunofluorescence - Anti-Calpain small subunit 1 antibody (ab28237)

ICC/IF image of ab28237 stained HeLa cells. The cells were 100% Methanol fixed (5 min) and then incubated in 1%BSA / 10% normal Goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab28237, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 Goat anti-Rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calpain small subunit 1 antibody (ab28237)

Ab28237 staining Human normal renal medulla. Staining is localized the nucleus and cytoplasm.
Left panel: with primary antibody at 1 ug/ml. Right panel: isotype control.
Sections were stained using an automated system DAKO Autostainer Plus , at room temperature. Sections were rehydrated and antigen retrieved with the Dako 3-in-1 AR buffer EDTA pH 9.0 in a DAKO PT Link. Slides were peroxidase blocked in 3% H_2O_2 in methanol for 10 minutes. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS), then incubated with primary antibody for 20 minutes, and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

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