

Product datasheet

Anti-Calpain 10 antibody ab28226

[1 Abreviews](#) [11 References](#) [2 Images](#)

Overview

| | |
|----------------------------|---|
| Product name | Anti-Calpain 10 antibody |
| Description | Rabbit polyclonal to Calpain 10 |
| Host species | Rabbit |
| Specificity | The antibody binds to Calpain-10, but does not cross react with the other calpain family members (Calpain-1, Calpain-2, Calpain-3, etc.). The antibody binds to the aminoterminal end of domain-III and recognizes latent and amino-processed Calpain-10. |
| Tested applications | Suitable for: ICC/IF, IHC-P |
| Species reactivity | Reacts with: Human |
| Immunogen | Synthetic peptide based on the aminoterminal end of domain-III in the large subunit, using the human sequence. Read Abcam's proprietary immunogen policy (Peptide available as ab41361 .) |
| General notes | <p>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.</p> <p>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</p> |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. |
| Storage buffer | Preservative: 0.05% Sodium azide Constituent: 50% Glycerol |
| Purity | Immunogen affinity purified |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab28226 in the following tested applications.

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

| Application | Abreviews | Notes |
|-------------|-----------|--|
| ICC/IF | | Use a concentration of 1 - 5 µg/ml. |
| IHC-P | | Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

Target

Function

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

Tissue specificity

Ubiquitous.

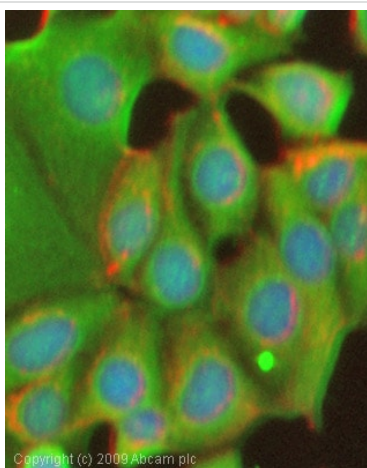
Involvement in disease

Defects in CAPN10 are a cause of susceptibility to diabetes mellitus non-insulin-dependent type 1 (NIDDM1) [MIM:601283]. It is a multifactorial disorder of glucose homeostasis caused by a lack of sensitivity to the body's own insulin. Affected individuals usually have an obese body habitus and manifestations of a metabolic syndrome characterized by diabetes, insulin resistance, hypertension and hypertriglyceridemia. The disease results in long-term complications that affect the eyes, kidneys, nerves, and blood vessels.

Sequence similarities

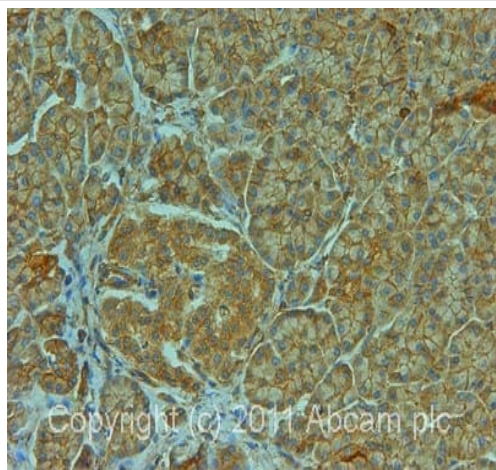
Belongs to the peptidase C2 family.
Contains 1 calpain catalytic domain.

Images



ICC/IF image of ab28226 stained MCF7 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 (ab28226, 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.

Immunocytochemistry/ Immunofluorescence - Anti-Calpain 10 antibody (ab28226)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calpain 10 antibody (ab28226)

IHC image of ab28226 staining in normal human pancreas formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab28226, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors