abcam

Product datasheet

Anti-Calpastatin antibody [SP82] ab101684

Recombinant RabMAb

6 Images

Overview

Product name	Anti-Calpastatin antibody [SP82]
Description	Rabbit monoclonal [SP82] to Calpastatin
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, IHC-P, Flow Cyt (Intra)
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human Calpastatin aa 550-650 (C terminal). The exact sequence is proprietary. Database link: **P20810**
Positive control	IHC-P: Human breast carcinoma tissue; Flow Cyt (Intra): HaCaT and HeLa cells; ICC/IF: HaCaT cells.
General notes	**This product is FOR RESEARCH USE ONLY. For commercial use, please contact partnerships@abcam.com.**

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
Purity	Protein A/G purified
Purification notes	Purified from TCS by protein A/G.
Clonality	Monoclonal
Clone number	SP82
Isotype	IgG

Applications

Our **Abpromise guarantee** covers the use of ab101684 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 at an assay dependent concentration.
IHC-P		1/100. Incubate for 30 minutes at RT. Antigen retrieval is recommended: boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.
Flow Cyt (Intra)		Use at an assay dependent concentration. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Target

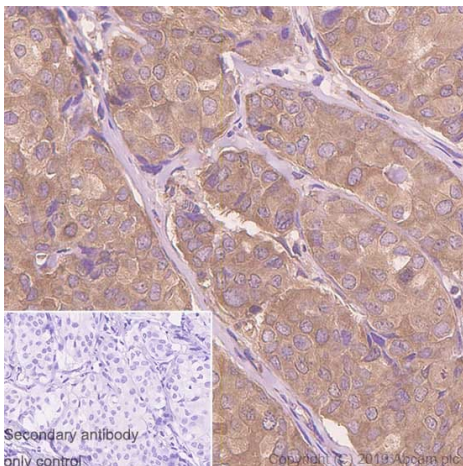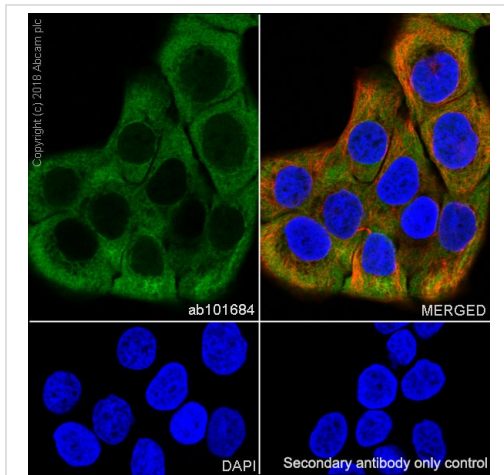|	
Function	Specific inhibition of calpain (calcium-dependent cysteine protease). Plays a key role in postmortem tenderization of meat and have been proposed to be involved in muscle protein degradation in living tissue.
Sequence similarities	Belongs to the protease inhibitor I27 (calpastatin) family.
Domain	Has four inhibitory domains.
Post-translational modifications	The N-terminus is blocked.

Images

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calpastatin antibody [SP82] (ab101684)
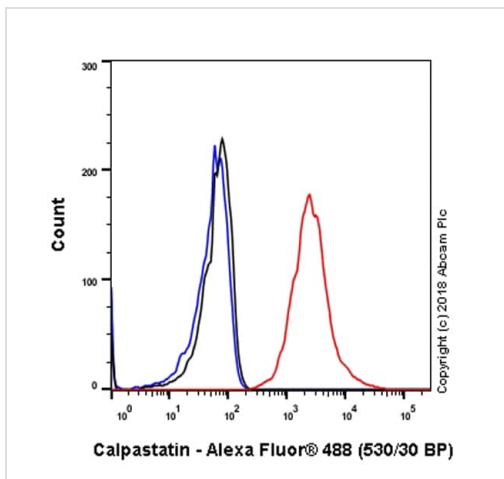
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast carcinoma tissue sections labeling Calpastatin with Purified ab101684 at 1/100 dilution (0.59 µg/ml). Heat mediated antigen retrieval was performed Heat mediated antigen retrieval with Citrate buffer (pH 6.0, epitope retrieval solution 1) for 20mins. Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.
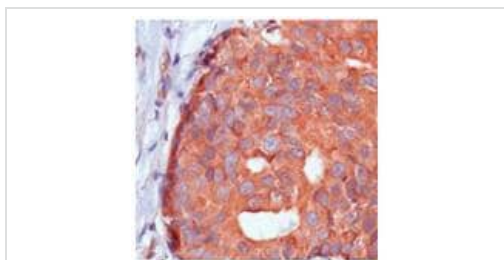
Immunocytochemistry/ Immunofluorescence - Anti-Calpastatin antibody [SP82] (ab101684)

Immunocytochemistry/ Immunofluorescence analysis of HaCaT (human skin keratinocyte) cells labeling Calpastatin with purified ab101684. Cells were fixed in 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. Cells were counterstained with **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody. DAPI was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.
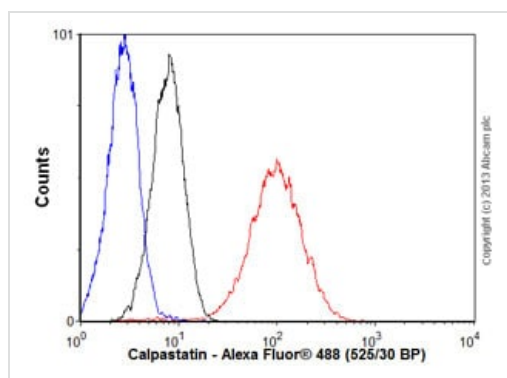

Flow Cytometry (Intracellular) - Anti-Calpastatin antibody [SP82] (ab101684)

Flow cytometry analysis of HaCaT (human skin keratinocyte) labeling Calpastatin with purified ab101684 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as a secondary antibody. Isotype control - Rabbit monoclonal IgG (**ab172730**) (black). Unlableled control - Unlabelled cells (blue).

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Calpastatin antibody [SP82] (ab101684)

Immunohistochemical analysis of Calpastatin in formalin-fixed, paraffin-embedded Human breast carcinoma using ab101684 at 1/200 dilution.

Flow Cytometry (Intracellular) - Anti-Calpastatin antibody [SP82] (ab101684)

Overlay histogram showing HeLa cells stained with ab101684 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab101684) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (**ab150077**) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

Anti-Calpastatin antibody [SP82] (ab101684)

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