# abcam

## Product datasheet

# Anti-Calpain small subunit 1 antibody [SP81] ab101683

ועלשעבע RabMAb

## 画像数6

#### 製品の概要

製品名 Anti-Calpain small subunit 1 antibody [SP81]

製品の詳細 Rabbit monoclonal [SP81] to Calpain small subunit 1

由来種 Rabbit

アプリケーション 適用あり: IHC-P, Flow Cyt (Intra)

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide within Human Calpain small subunit 1 aa 50-150 (internal sequence). The exact

> sequence is proprietary. Database link: P04632

ポジティブ・コントロール Flow Cyt (Intra): HeLa, PC-12 and NIH/3T3IHC-P: Human breast carcinoma tissue

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

This product is FOR RESEARCH USE ONLY. For commercial use, please contact

partnerships@abcam.com.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.60

> Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA

Protein A/G purified 精製度

特記事項(精製) Purified from TCS by protein A/G.

ポリモノ モノクローナル

クローン名 SP81

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab101683の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P		1/100. Antigen retrieval is recommeded: boil tissue section in 10mM citrate buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.
Flow Cyt (Intra)		1/20.

#### ターゲット情報

機能	Regulatory subunit of the calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.	
配列類似性	Contains 5 EF-hand domains.	
ドメイン	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	

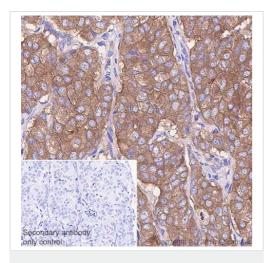
regulatory subunit for the formation of the heterodimer.

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.

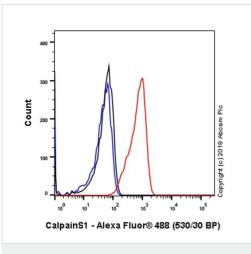
**細胞内局在** Cytoplasm. Cell membrane. Translocates to the plasma membrane upon calcium binding.

#### 画像



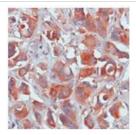
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calpain small subunit 1 antibody [SP81] (ab101683)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast carcinoma tissue sections labeling Calpain small subunit 1 with ab101683 at 1/100 dilution (0.94 µg/ml). Heat mediated antigen retrieval with sodium citrate buffer (pH 6.0, epitope retrieval solution 1) for 10mins. Rabbit specific IHC polymer detection kit HRP/DAB (ab209101) was used as the secondary antibody. Hematoxylin was used as a counterstain. Positive staining on human breast carcinoma, performed on a Leica Biosystems BOND™ RX instrument. The section was incubated with ab101683 for 30 mins at room temperature.



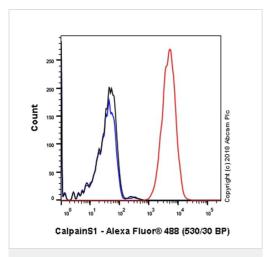
Flow Cytometry (Intracellular) - Anti-Calpain small subunit 1 antibody [SP81] (ab101683)

Flow cytometry analysis of Hela (human cervix adenocarcinoma) labeling Calpain small subunit 1 with purified ab101683 at 1/20 dilution (4.5  $\mu$ g/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit lgG (Alexa Fluor® 488, <u>ab150077</u>) at 1/2000 dilution was used as a secondary antibody. Isotype control - Rabbit monoclonal lgG (<u>ab172730</u>) (Black). Unlableled control - Unlabelled cells (blue).



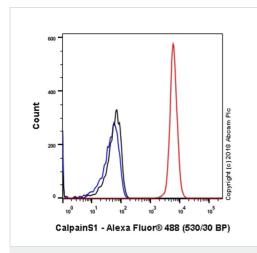
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calpain small subunit 1 antibody [SP81] (ab101683)

Immunohistochemical analysis of Calpain expression in formalinfixed, paraffin-embedded Human breast carcinoma using ab101683 at 1/100 dilution.



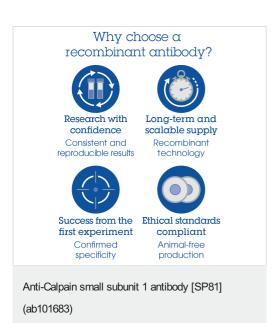
Flow Cytometry (Intracellular) - Anti-Calpain small subunit 1 antibody [SP81] (ab101683)

Flow cytometry analysis of PC-12 (rat adrenal gland pheochromocytoma) labeling Calpain small subunit 1 with purified ab101683 at 1/20 dilution (4.5 μg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, <u>ab150077</u>) at 1/2000 dilution was used as a secondary antibody. Isotype control - Rabbit monoclonal lgG (<u>ab172730</u>) (Black). Unlableed control - Unlabelled cells (blue).



Flow Cytometry (Intracellular) - Anti-Calpain small subunit 1 antibody [SP81] (ab101683)

Flow cytometry analysis of NIH/3T3 (mouse embryo) labeling Calpain small subunit 1 with purified ab101683 at 1/20 dilution (4.5 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488, **ab150077**) at 1/2000 dilution was used as a secondary antibody. Isotype control - Rabbit monoclonal lgG (**ab172730**) (Black). Unlableled control - Unlabelled cells (blue).



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