

For Research Use Only

cleaved-Caspase 3 Polyclonal antibody



Catalog Number: 25546-1-AP

128 Publications

Basic Information

Catalog Number: 25546-1-AP	GenBank Accession Number: NM_032991	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 320 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 836	Recommended Dilutions: WB 1:500-1:1000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
Source: Rabbit	Full Name: caspase 3, apoptosis-related cysteine peptidase	IHC 1:20-1:200 IF 1:20-1:200
Isotype: IgG	Calculated MW: 32 kDa	
	Observed MW: 17 kDa	

Applications

Tested Applications:
FC, IF, IHC, IP, WB, ELISA

Cited Applications:
FC, IF, IHC, WB

Species Specificity:
human, mouse, rat

Cited Species:
human, rat, sheep, mouse, hamster

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : Tunicamycin treated HepG2 cells, Tunicamycin treated HeLa cells, Staurosporine treated Jurkat cells

IP : Jurkat cells,

IHC : human skeletal muscle tissue,

IF : HepG2 cells,

Background Information

Caspase 3, also named CPP32, SCA-1, and Apopain, belongs to the peptidase C14A family. Caspase 3 is involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis, it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-I-Gly-217' bond. Caspase 3 cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7, and -9. CASP3 is involved in the cleavage of huntingtin. The antibody can recognize active-caspase 3.

Notable Publications

Author	Pubmed ID	Journal	Application
Samana Batool	30274346	Int J Mol Sci	WB
Genquan Yue	31702026	Mol Med Rep	WB
Kate D Meyer	31548708	Nat Methods	

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

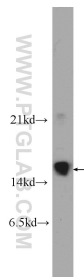
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

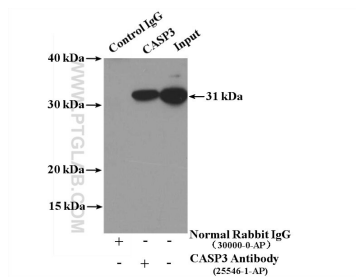
E: proteintech@ptglab.com
W: ptglab.com

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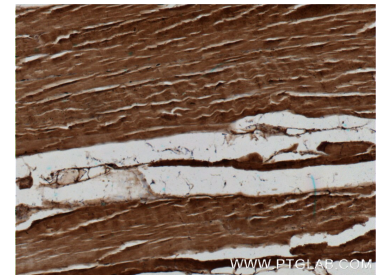
Selected Validation Data



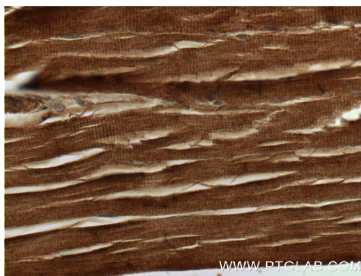
Tunicamycin treated HepG2 cells were subjected to SDS PAGE followed by western blot with 25546-1-AP (Caspase 3 Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



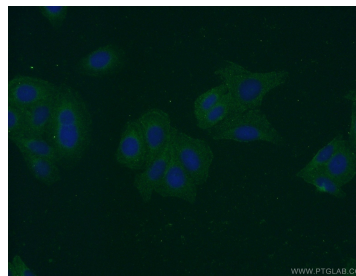
IP Result of anti-Caspase 3 (IP:25546-1-AP, 4ug; Detection:25546-1-AP 1:300) with Jurkat cells lysate 3200ug.



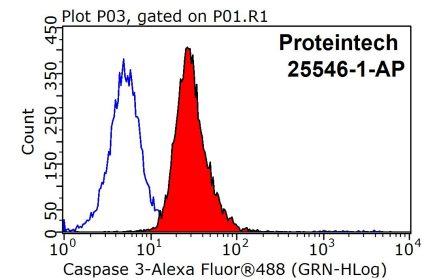
Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 25546-1-AP (Caspase 3 Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human skeletal muscle tissue slide using 25546-1-AP (Caspase 3 Antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of HepG2 cells using 25546-1-AP (Caspase 3 Antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10⁶ HeLa cells were stained with 0.2ug Caspase 3 antibody (25546-1-AP, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) with dilution 1:1000.