For Research Use Only

cleaved-Caspase 3 Polyclonal antibody

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Antibodies | ELISA kits | Proteins
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Catalog Number:25546-1-AP 129 Publications

Basic Information

Catalog Number:
25546-1-AP

Size:
320 μg/ml

Source:
Rabbit

Isotype:
IgG

GenBank Accession Number:
NM_032991

GeneID (NCBI):
836

UNIPROT ID:
P42574

Full Name:
caspase 3, apoptosis-related cysteine peptidase

Calculated MW:
32 kDa

Observed MW:
17 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC 1:20-1:200
IF/ICC 1:20-1:200

Applications

Tested Applications:
WB, IP, IF/ICC, IHC, ELISA

Cited Applications:
WB, IF, IHC

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/ICC : 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-|-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

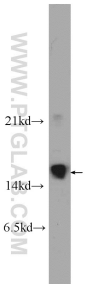
Author	Pubmed ID	Journal	Application
Samana Batool	30274346	Int J Mol Sci	WB
Genquan Yue	31702026	Mol Med Rep	WB
Kate D Meyer	31548708	Nat Methods	

Storage

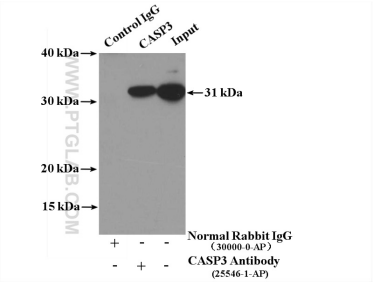
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

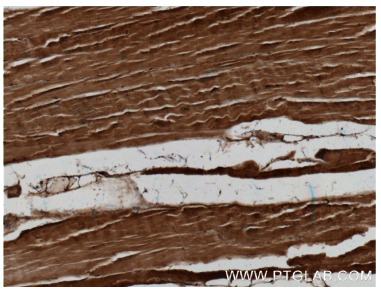
Selected Validation Data



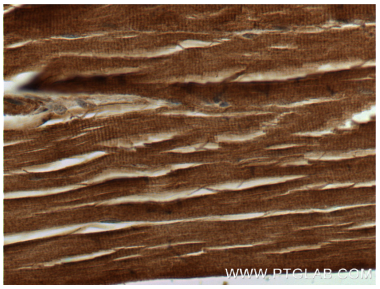
Tunicamycin treated HepG2 cells were subjected to SDS PAGE followed by western blot with 25546-1-AP (Caspase 3 Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



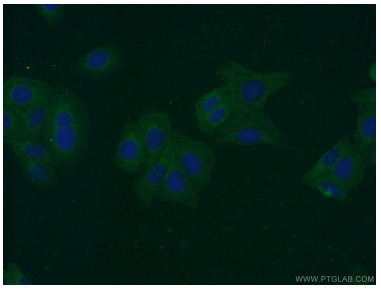
IP result of anti-cleaved-Caspase 3 (IP:25546-1-AP, 4ug; Detection:25546-1-AP 1:300) with Jurkat cells lysate 3200ug.



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).