

For Research Use Only

Caspase 3/p17/p19 Polyclonal antibody



Catalog Number: 19677-1-AP

Featured Product

2028 Publications

Basic Information

Catalog Number:

19677-1-AP

Size:

150ul, Concentration: 600 µg/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_004346

GeneID (NCBI):

836

UNIPROT ID:

P42574

Full Name:

caspase 3, apoptosis-related cysteine peptidase

Calculated MW:

32 kDa

Observed MW:

32-35 kDa, 17 kDa, 19 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:2000

IP 0.5-4.0 µg for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF 1:50-1:500

Applications

Tested Applications:

WB, IP, IF, FC, IHC, ELISA

Cited Applications:

WB, IP, IF, RIP, IHC, ELISA

Species Specificity:

human, mouse, rat

Cited Species:

human, goat, chicken, rat, sheep, mouse, monkey, rabbit, Zebrafish, 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: Jurkat cells, mouse spleen tissue, HeLa cells, Staurosporine treated Jurkat cells, rat brain tissue, rat liver tissue

IP: NIH/3T3 cells,

IHC: mouse brain tissue, human teeth tissue, human spleen tissue, human kidney tissue

IF: NIH/3T3 cells, mouse brain tissue, HeLa cells, Retinal organoids

Background Information

Caspases, a family of endoproteases, are critical players in cell regulatory networks controlling inflammation and cell death. Initiator caspases (caspase-2, -8, -9, -10, -11, and -12) cleave and activate downstream effector caspases (caspase-3, -6, and -7), which in turn execute apoptosis by cleaving targeted cellular proteins. Caspase 3 (also named CPP32, SCA-1, and Apopain) proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at the beginning of apoptosis. Caspase 3 plays a key role in the activation of sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Caspase 3 can also form heterocomplex with other proteins and performs the molecular mass of 50-70 kDa (PMID:9747872). This antibody can recognize p17, p19 and p32 of Caspase 3.

Notable Publications

Author	Pubmed ID	Journal	Application
Xin Shen	36184549	Int Heart J	WB
Xiao-Feng Zhu	36180975	Phytother Res	WB
Ji Xing	36230734	Cancers (Basel)	WB

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

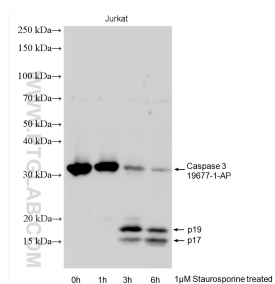
For technical support and original validation data for this product please contact:

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

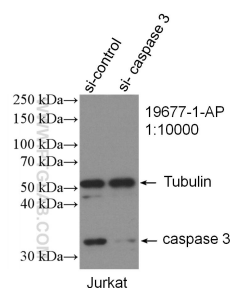
E: proteintech@ptglab.com
W: ptglab.com

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

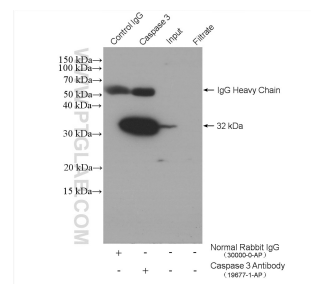
Selected Validation Data



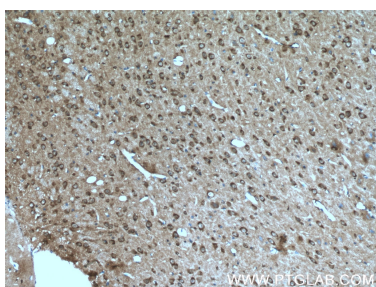
Untreated and Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 19677-1-AP (Caspase 3/p17/p19 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



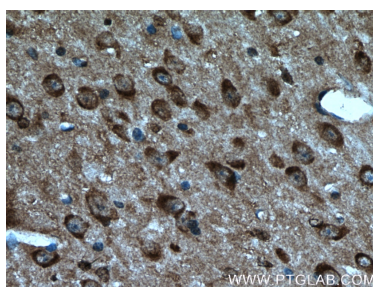
WB result of Caspase 3 antibody (19677-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Caspase 3 transfected Jurkat cells.



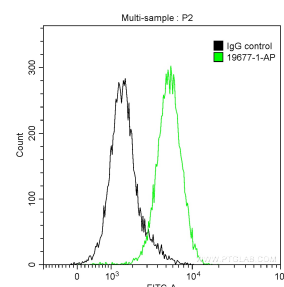
IP result of anti-Caspase 3/p17/p19 (IP:19677-1-AP, 4ug; Detection:19677-1-AP 1:300) with NIH/3T3 cells lysate 3440 ug.



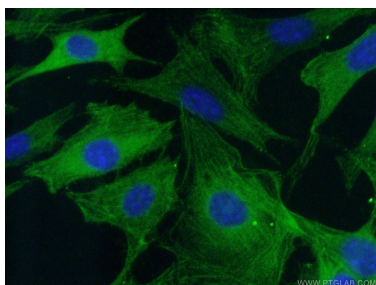
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19677-1-AP (Caspase 3 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19677-1-AP (Caspase 3 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10⁶ HepG2 cells were intracellularly stained with 0.2 ug Anti-Human Caspase 3/p17/p19 (19677-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (green), and 0.2 ug Control Antibody. Cells were fixed with 90% MeOH.



Immunofluorescent analysis of (-20°C Ethanol) fixed NIH/3T3 cells using 19677-1-AP (Caspase 3 antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).