

For Research Use Only

# Caspase 3/P17/P19 Polyclonal antibody

Catalog Number: 19677-1-AP

Featured Product

2369 Publications



## Basic Information

### Catalog Number:

19677-1-AP

### Size:

150ul, Concentration: 600 ug/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 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF-P 1:200-1:800

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, RIP, ELISA

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, rabbit, monkey, chicken, zebrafish, hamster, sheep, goat

**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-P:** mouse liver tissue, mouse brain tissue, mouse eye tissue

**IF/ICC:** NIH/3T3 cells, HeLa cells

## 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, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

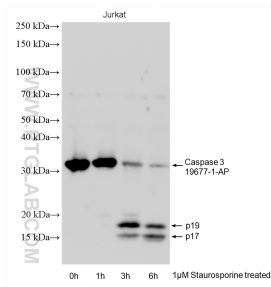
For technical support and original validation data for this product please contact:

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

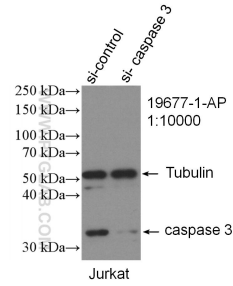
E: proteintech@ptglab.com  
W: ptglab.com

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

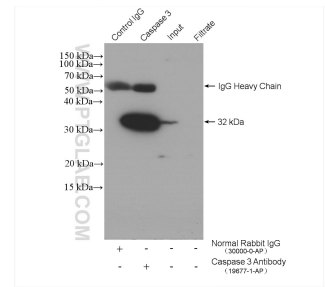
## Selected Validation Data



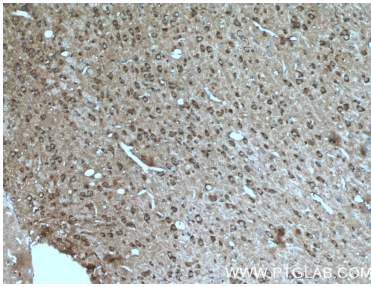
Untreated and Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 19677-1-AP (Caspase 3/p17/p19 antibody) at dilution of 1:800 incubated at room temperature for 1.5 hours.



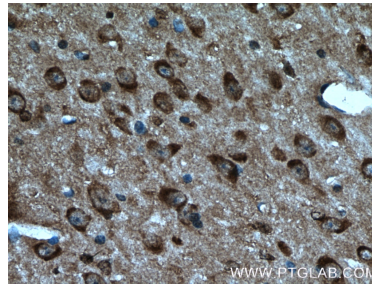
WB result of Caspase 3 antibody (19677-1-AP; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Caspase 3 transfected Jurkat cells.



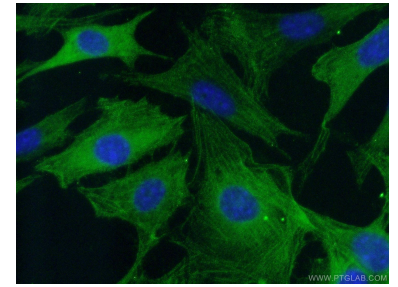
IP result of anti-Caspase 3/p17/p19 (IP:19677-1-AP, 4ug; Detection:19677-1-AP 1:300) with NIH/3T3 cells lysate 3440 ug.



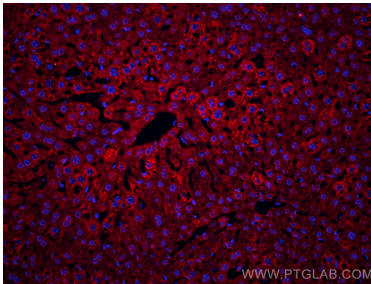
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 19677-1-AP (Caspase 3 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



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).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using Caspase 3/p17/p19 antibody (19677-1-AP) at dilution of 1:400 and Coralite® 594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse eye tissue using Caspase 3/p17/p19 antibody (19677-1-AP) at dilution of 1:200 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).