

For Research Use Only

Caspase 3/P17/P19 Recombinant monoclonal antibody

Catalog Number: 82202-1-RR

Featured Product

45 Publications



Basic Information

Catalog Number:

82202-1-RR

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:

Protein A purification

CloneNo.:

5G20

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:250-1:1000

IF/ICC: 1:500-1:2000

FC (Intra): 0.40 ug per 10⁶ cells in a 100 µl suspension

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat, rabbit, bovine

Positive Controls:

WB : Staurosporine treated Jurkat cells, HepG2 cells, HeLa cells, NIH/3T3 cells

IHC : mouse brain tissue,

IF/ICC : HeLa cells,

FC (Intra) : HepG2 cells,

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

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. This antibody can recognize p17, p19 and p32 of Caspase 3.

Notable Publications

Author	Pubmed ID	Journal	Application
Xinyu Zhao	40641838	Bioact Mater	IHC
Hui Liu	40481493	J Nanobiotechnology	WB
Małgorzata Myszka	40476490	Antioxid Redox Signal	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

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

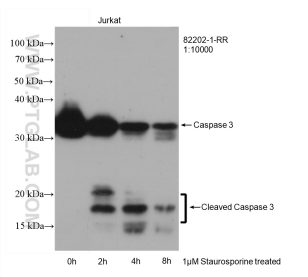
T: 4006900926

E: Proteintech-CN@ptglab.com

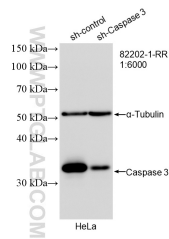
W: ptgcn.com

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

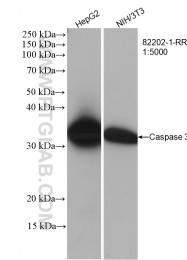
Selected Validation Data



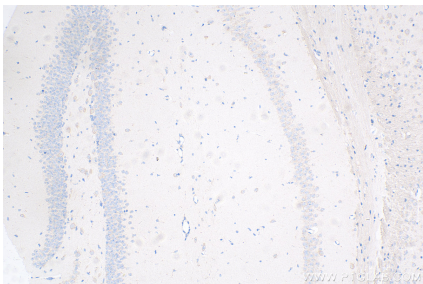
Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



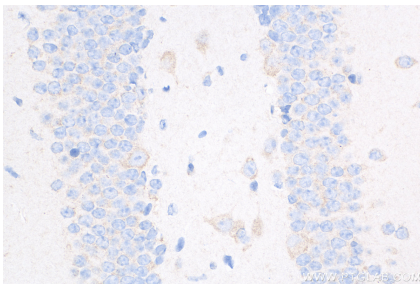
WB result of Caspase 3/P17/P19 antibody (82202-1-RR; 1:6000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Caspase 3/P17/P19 transfected HeLa cells.



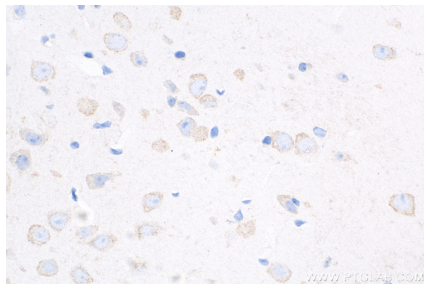
Various lysates were subjected to SDS PAGE followed by western blot with 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



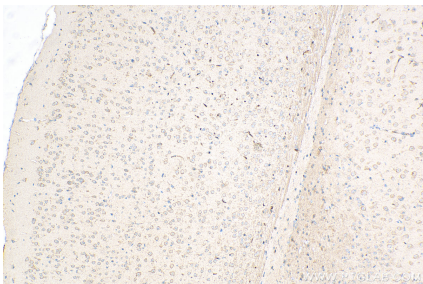
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



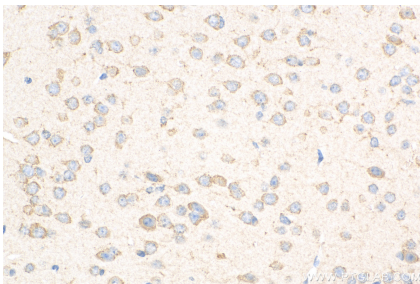
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



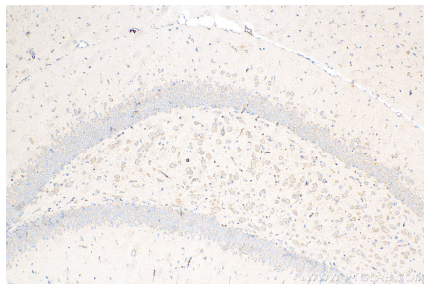
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



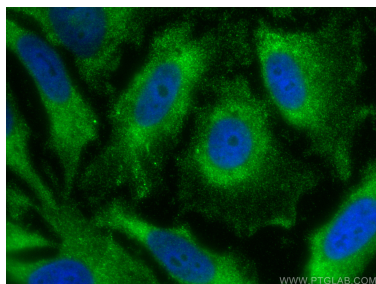
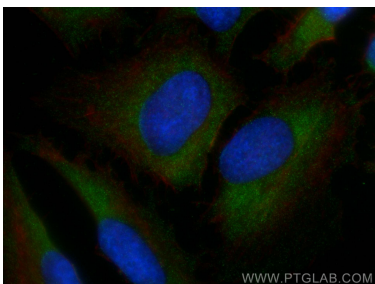
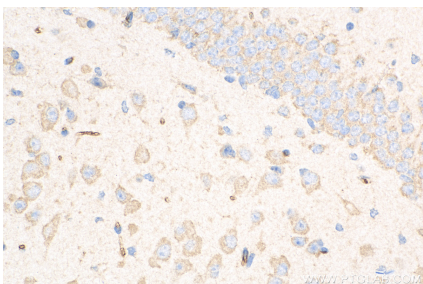
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



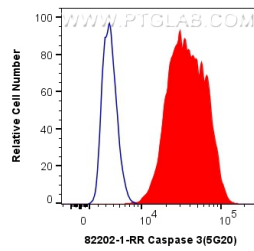
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 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 HeLa cells using Caspase 3/P17/19 antibody (82202-1-RR, Clone: 5G20) at dilution of 1:1000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-phalloidin (red).

Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Caspase 3/P17/19 antibody (82202-1-RR, Clone: 5G20) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



1X10⁶ HepG2 cells were intracellularly stained with 0.4 ug Anti-Human Caspase 3/P17/19 (82202-1-RR, Clone:5G20) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer.