For Research Use Only

Caspase 3/P17/P19 Recombinant antibody

Catalog Number:82202-1-RR

23 Publications

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Basic Information

Catalog Number:
82202-1-RR

Size:
100ul , Concentration: 1000 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:
Protein A purification

CloneNo.:
5G20

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:250-1:1000
IF/ICC 1:500-1:2000

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), ELISA

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse

Cited Species:
human, mouse, rat, bovine

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 : Staurosporine treated Jurkat cells, HepG2 cells

IHC : mouse brain tissue,

IF/ICC : 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. This antibody can recognize p17, p19 and p32 of Caspase 3.

Notable Publications

Author	Pubmed ID	Journal	Application
Yunna Jia	40004224	Int J Mol Sci	WB
Tuohua Mao	39896707	Diabetes Metab Syndr Obes	WB
Qingsheng Meng	39817595	CNS Neurosci Ther	WB

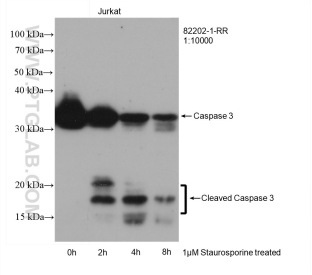
Storage

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

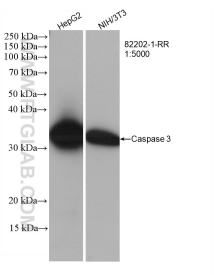
***** 20ul sizes contain 0.1% BSA**

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

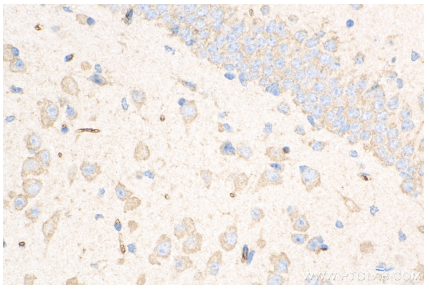
Selected Validation Data



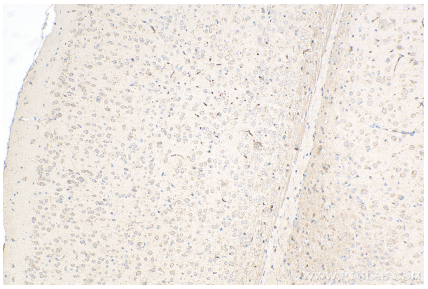
Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



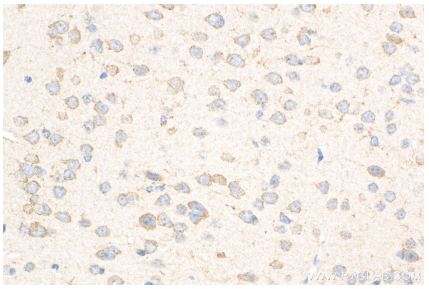
Various lysates were subjected to SDS PAGE followed by western blot with 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:200 (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).



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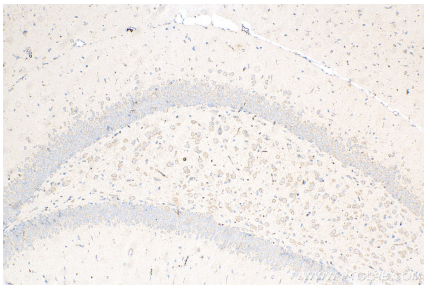

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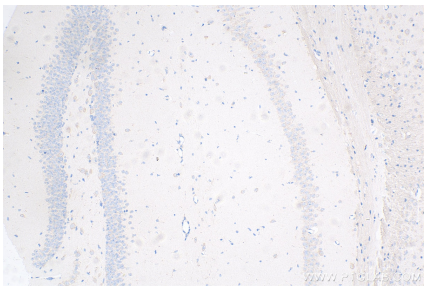
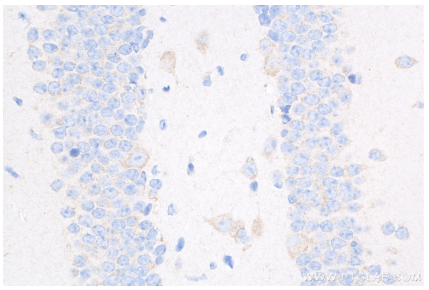
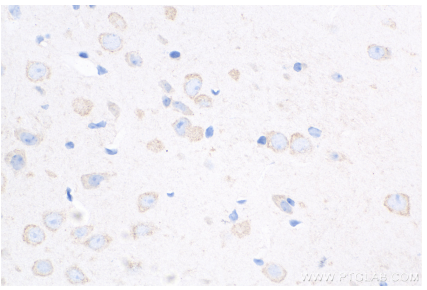


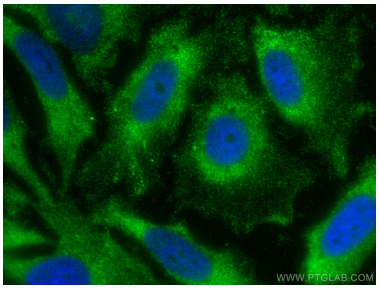
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

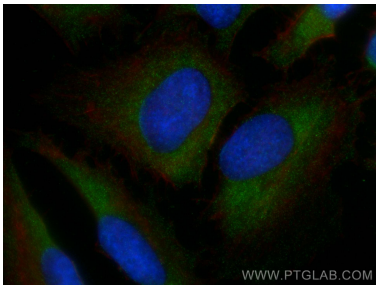


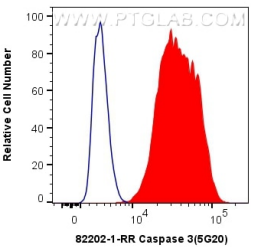
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 82202-1-RR (Caspase 3/P17/19 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).







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).

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).

1X10^6 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 (PF00011-C).