

For Research Use Only

# Cleaved Caspase 3/P17/P19 Monoclonal antibody

Catalog Number: 68773-1-Ig **20 Publications**



## Basic Information

<b>Catalog Number:</b> 68773-1-Ig	<b>GenBank Accession Number:</b> NM_032991	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 150ul, Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 836	<b>CloneNo.:</b> 2F7B8
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> P42574	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:1000-1:4000 IF-P 1:200-1:800 IF/ICC 1:500-1:2000
<b>Isotype:</b> IgG1	<b>Full Name:</b> caspase 3, apoptosis-related cysteine peptidase	
	<b>Calculated MW:</b> 32 kDa	
	<b>Observed MW:</b> 17 kDa, 19 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA	<b>Positive Controls:</b> <b>WB:</b> Jurkat cells, A2780 cells, BV-2 cells, HepG2 cells, HSC-T6 cells, Ramos cells <b>IP:</b> Staurosporine treated Jurkat cells, <b>IHC:</b> human lymphoma tissue, Jurkat cells <b>IF-P:</b> mouse liver tissue, <b>IF/ICC:</b> 1 µM Staurosporine (1/3/6 hour) treated Jurkat cells, 50 µM Cisplatin (18 hours) treated BV-2 cells, 1 µM Staurosporine (1/3/6 hour) treated HSC-T6 cells
<b>Cited Applications:</b> WB, IHC, IF	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, mouse	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## 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 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 form heterocomplex with other proteins. This antibody can recognize p17 of Caspase 3. This antibody is specific for cleaved caspase 3, and does not recognize full length caspase-3, it can recognize the 17 kDa cleaved-caspase 3. The cleaved P17 and P19 fragment might form complex and shows at around 30-35 kDa by western blot (PMID: 25501826).

## Notable Publications

Author	Pubmed ID	Journal	Application
Maoxing Fei	39915357	Mol Neurobiol	WB
Yen-Ting Lu	39901768	J Extracell Vesicles	IF
Hao Zhang	39763059	Clin Transl Med	WB

## Storage

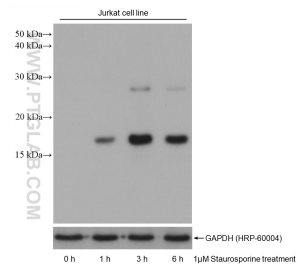
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
Aliquoting is unnecessary for -20°C storage

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

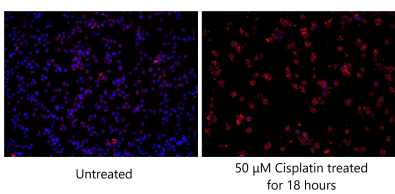
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

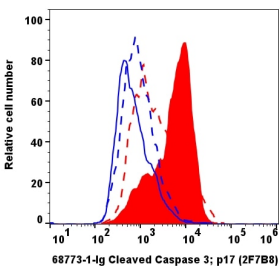
Selected Validation Data



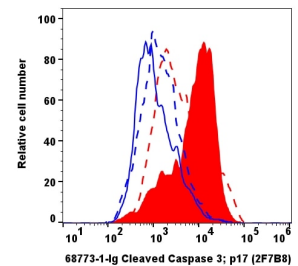
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



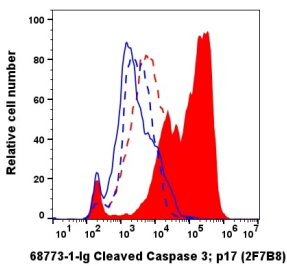
Immunofluorescent analysis of (4% PFA) fixed 50  $\mu$ M Cisplatin (18 hours) treated BV-2 cells using Cleaved Caspase 3/P17/P19 antibody (68773-1-Ig, Clone: 2F7B8 ) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004 ).



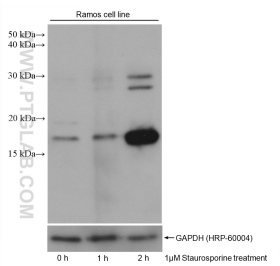
1x10<sup>6</sup> non-treated Jurkat cells (dash lines) and staurosporine treated Jurkat cells (solid lines) were intracellularly stained with 0.1  $\mu$ g Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-Ig, Clone:2F7B8, red) and Multi-rAb CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA .



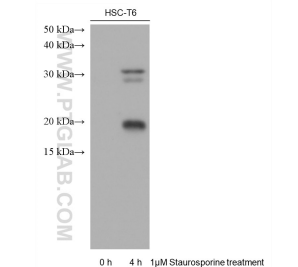
1x10<sup>6</sup> non-treated Jurkat cells (dash lines) and staurosporine treated Jurkat cells (solid lines) were intracellularly stained with 0.2  $\mu$ g Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-Ig, Clone:2F7B8, red) and Multi-rAb CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA .



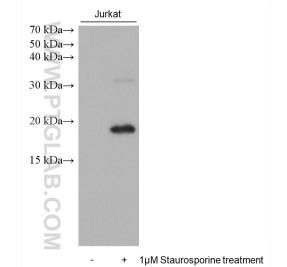
1x10<sup>6</sup> non-treated BV-2 cells (dash lines) and cisplatin treated BV-2 cells (solid lines) were intracellularly stained with 0.2  $\mu$ g Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-Ig, Clone:2F7B8, red) and Multi-rAb CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA .



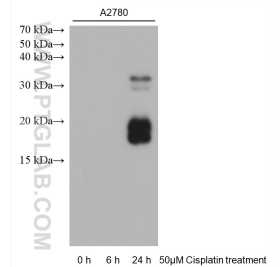
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



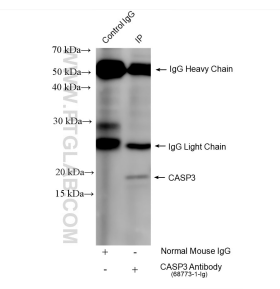
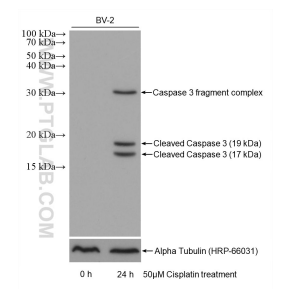
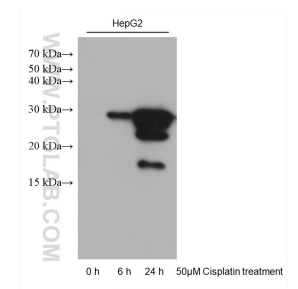
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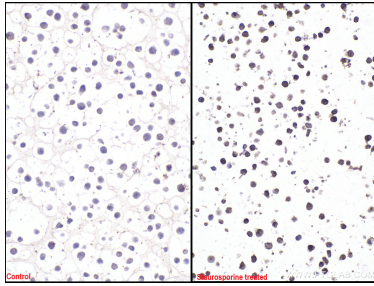
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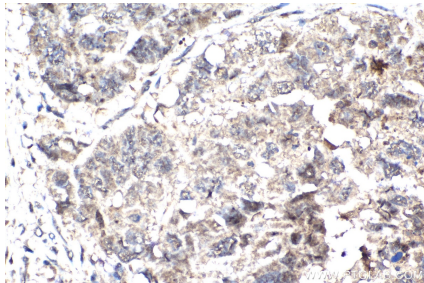
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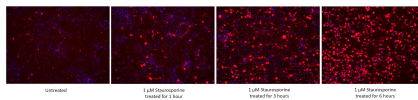
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded Jurkat cells slide using 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

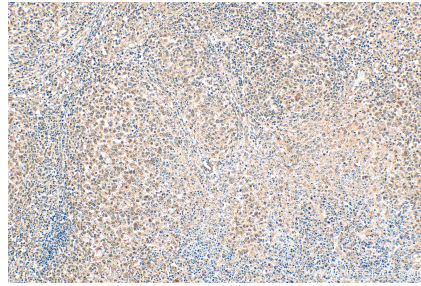


Immunohistochemical analysis of paraffin-embedded human ovary cancer tissue slide using 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

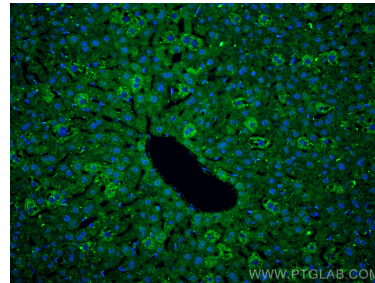


Immunofluorescent analysis of (4% PFA) fixed non-treated and 1  $\mu$ M Staurosporine (1/3/6 hours) treated HSC-T6 cells using Cleaved Caspase 3/P17/P19 antibody (68773-1-Ig, Clone: 2F7B8 ) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).

Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

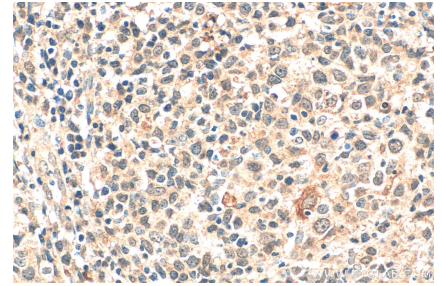


Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

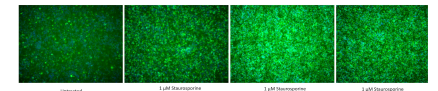


Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using Cleaved Caspase 3/P17/P19 antibody (68773-1-Ig, Clone: 2F7B8 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

IP result of anti-Cleaved Caspase 3/P17/P19 (IP:68773-1-Ig, 4ug; Detection:68773-1-Ig 1:5000) with Staurosporine treated Jurkat cells lysate 720 ug.



Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed non-treated and 1  $\mu$ M Staurosporine (1/3/6 hours) treated Jurkat cells using Cleaved Caspase 3/P17/P19 antibody (68773-1-Ig, Clone: 2F7B8 ) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L)(Cat.NO. RGAM002 ).