

# 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>Concentration:</b> 1000 ug/ml	<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
<b>Isotype:</b> IgG1	<b>Full Name:</b> caspase 3, apoptosis-related cysteine peptidase	IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
	<b>Calculated MW:</b> 32 kDa	IHC 1:1000-1:4000
	<b>Observed MW:</b> 17 kDa, 19 kDa	IF-P 1:200-1:800
		IF/ICC 1:500-1:2000

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA	<b>Positive Controls:</b>
<b>Cited Applications:</b> WB, IHC, IF	<b>WB:</b> Jurkat cells, A2780 cells, BV-2 cells, HepG2 cells, HSC-T6 cells, Ramos cells
<b>Species Specificity:</b> human, mouse, rat	<b>IP:</b> Staurosporine treated Jurkat cells,
<b>Cited Species:</b> human, mouse	<b>IHC:</b> human lymphoma tissue, Jurkat cells
<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>	<b>IF-P:</b> mouse liver tissue,
	<b>IF/ICC:</b> 1 $\mu$ M Staurosporine (1/3/6 hour) treated Jurkat cells, 50 $\mu$ M Cisplatin (18 hours) treated BV-2 cells, 1 $\mu$ M Staurosporine (1/3/6 hour) treated HSC-T6 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 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).

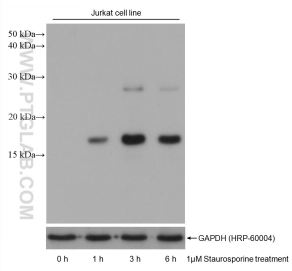
## Notable Publications

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

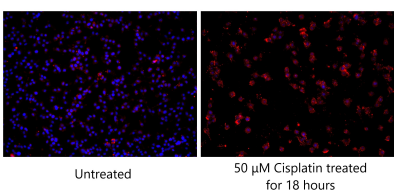
## Storage

**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

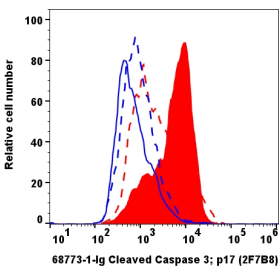
Selected Validation Data



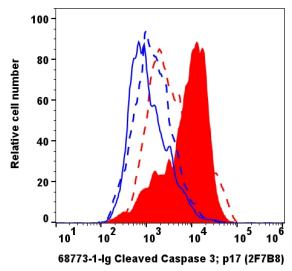
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



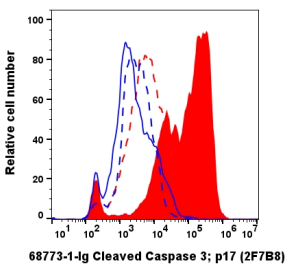
Immunofluorescent analysis of (4% PFA) fixed 50 μM Cisplatin (18 hours) treated BV-2 cells using Cleaved Caspase 3/P17/P19 antibody (68773-1-Ig, Clone: 2F7B8 ) at dilution of 1:1000 and Multi-rAb Coralite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004 ).



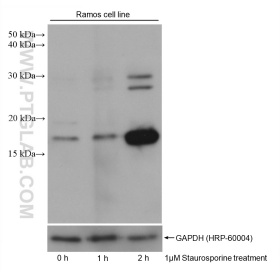
1x10<sup>6</sup> non-treated Jurkat cells (dash lines) and staurosporine treated Jurkat cells (solid lines) were intracellularly stained with 0.1 μg Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-Ig, Clone:2F7B8, red) and Multi-rAb Coralite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (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 .



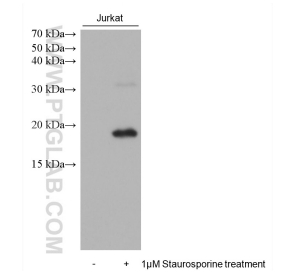
1x10<sup>6</sup> non-treated Jurkat cells (dash lines) and staurosporine treated Jurkat cells (solid lines) were intracellularly stained with 0.2 μg Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-Ig, Clone:2F7B8, red) and Multi-rAb Coralite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (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 .



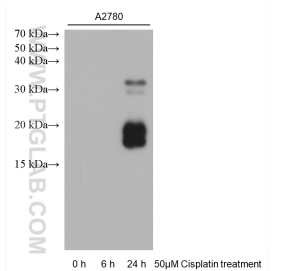
1x10<sup>6</sup> non-treated BV-2 cells (dash lines) and cisplatin treated BV-2 cells (solid lines) were intracellularly stained with 0.2 μg Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-Ig, Clone:2F7B8, red) and Multi-rAb Coralite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L)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



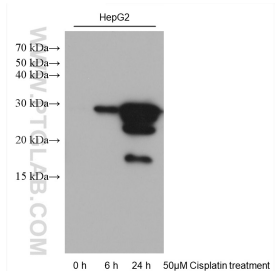
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



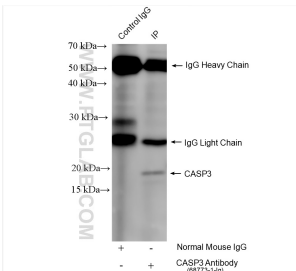
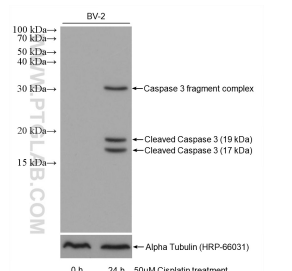
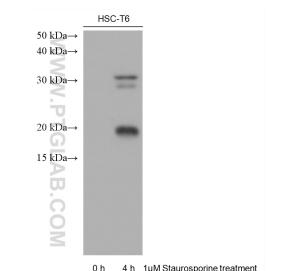
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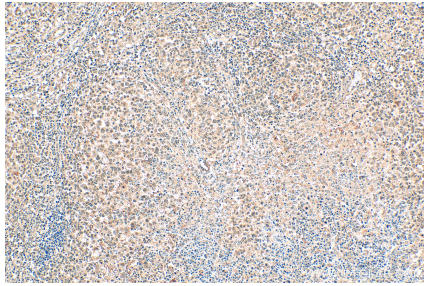
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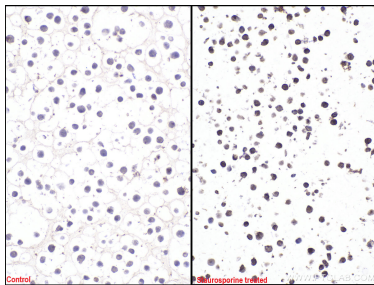
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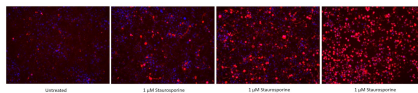
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded 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).

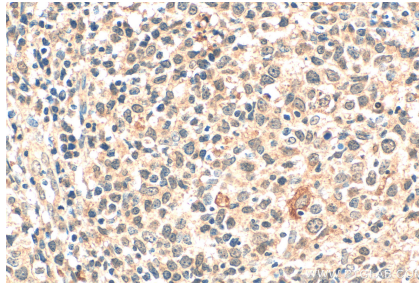


Immunohistochemical analysis of paraffin-embedded Jurkat cells slide using 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

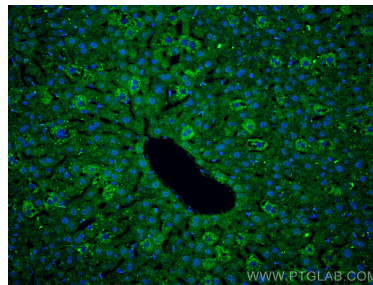


Immunofluorescent analysis of (4% PFA) fixed non-treated and 1  $\mu$  M Staurosporine (1/3/6 hours) treated HSC-T6 cells using Cleaved Caspase 3/P17/P19 antibody (68773-1-Ig, Clone: 2F7B8 ) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO.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

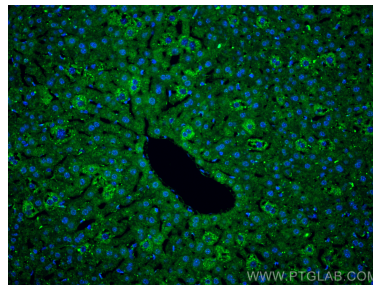
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



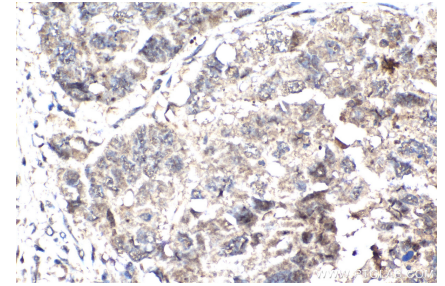
Immunohistochemical analysis of paraffin-embedded human lymphoma tissue slide using 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



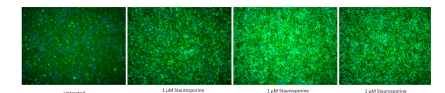
Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using Cleaved Caspase 3/P17/P19 antibody (68773-1-Ig, Clone: 2F7B8 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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 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 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 ).

