## For Research Use Only

# Cleaved Caspase 3/P17/P19 Monoclonal antibody

Catalog Number: 68773-1-lg 25 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number: Purification Method: 68773-1-lg NM\_032991 Protein G purification

Size:GeneID (NCBI):CloneNo.:150ul , Concentration: 1000 ug/ml by8362F7B8

 Nanodrop;
 UNIPROT ID:
 Recommended Dilutions:

 Source:
 P42574
 WB: 1:5000-1:50000

Mouse Full Name: IP: 0.5-4.0 ug for 1.0-3.0 mg of total

 Isotype:
 caspase 3, apoptosis-related cysteine
 protein lysate

 IgG1
 peptidase
 IHC: 1:1000-1:4000

| IF-P: 1:200-1:800 | Calculated MW: | IF/ICC: 1:500-1:2000 |

32 kDa FC (Intra): 0.20 ug per 10^6 cells in a

Observed MW: 100 µl suspension 17 kDa, 19 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

Cited Applications: WB, IHC, IF Species Specificity:

human, mouse, rat Cited Species: human, mouse

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, A2780 cells, BV-2 cells, HepG2 cells,

HSC-T6 cells, Ramos cells

IP: Staurosporine treated Jurkat cells,

IHC: human lymphoma tissue, Jurkat cells

IF-P: mouse liver tissue,

IF/ICC: 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

FC (Intra): 1 µM Staurosporine (3 hours) treated Jurkat cells, 50 µM Cisplatin 18h treated BV-2 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 is specific for cleaved caspase 3, and does not recognize full length 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
Junbao Liao	40064243	Brain Res Bull	WB
Huayang Yu	40049103	Phytomedicine	WB
Tong Lei	40023970	Phytomedicine	IF

Storage

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffe

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

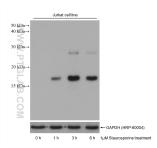
\*\*\* 20ul sizes contain 0.1% BSA

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

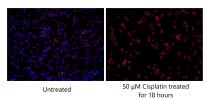
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

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.

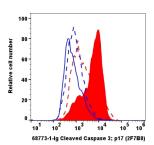
### Selected Validation Data



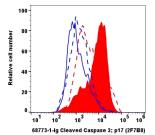
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-1g (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



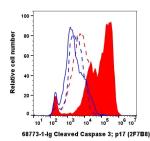
Immunofluorescent analysis of (4% PFA) fixed 50 µM Cisplatin (18 hours) treated BV-2 cells using Cleaved Caspaes 3/P17/P19 antibody (68773-1-lg, Clone: 2F7B8) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



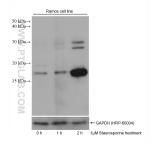
1x10^6 non-treated Jurkat cells (dash lines) and staurosporine treated Jurkat cells (solid lines) were intracellularly stained with 0.1 µg Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-Ig, Clone:2F7B8, red) and Multi-rAb Coralite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 496 PFA.



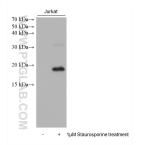
1x10^6 non-treated Jurkat cells (dash lines) and staurosporine treated Jurkat cells (solid lines) were intracellularly stained with 0.2 µg Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-lg, Clone:2F7B8, red) and Multi-rAb CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM005). Mouse lgG1 isotype control (66360-1-lg, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA.



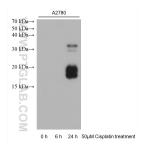
1x10^6 non-treated BV-2 cells (dash lines) and cisplatin treated BV-2 cells (solid lines) were intracellularly stained with 0.2 µg Cleaved Caspase 3/P17/P19 Monoclonal antibody (68773-1-Ig, Clone:2F788, red) and Multi-rAb Coralite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA.



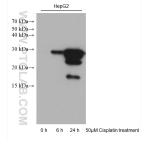
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-1g (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



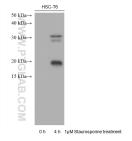
Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5

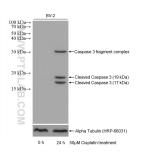


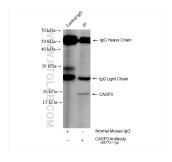
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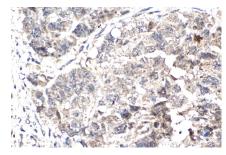




Various lysates were subjected to SDS PAGE followed by western blot with 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours

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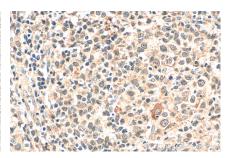
IP result of anti-Cleaved Caspase 3/P17/P19 (IP:68773-1-Ig, 4ug; Detection:68773-1-Ig 1:5000) with Staurosporine treated Jurkat cells lysate 720 ug.



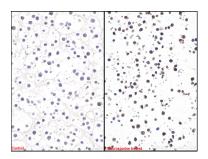
Immunohistochemical analysis of paraffinembedded human ovary cancer tissue slide using 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human lymphoma tissue slide using 68773-1-lg (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (nH o n)



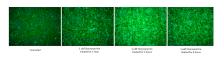
Immunohistochemical analysis of paraffinembedded human lymphoma tissue slide using 68773-1-Ig (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



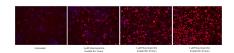
Immunohistochemical analysis of paraffinembedded Jurkat cells slide using 68773-1-lg (Cleaved Caspase 3/P17/P19 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse liver tissue using Cleaved Caspase 3/P17/P19 antibody (68773-1-lg, Clone: 2F788) 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).



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).



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