

For Research Use Only

Caspase 3/p17/p19 Monoclonal antibody



Catalog Number: 66470-2-Ig

Featured Product

130 Publications

Basic Information

Catalog Number: 66470-2-Ig	GenBank Accession Number: BC016926	Purification Method: Protein A purification
Size: 150ul , Concentration: 1000 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 836	CloneNo.: 2G4B2
Source: Mouse	Full Name: caspase 3, apoptosis-related cysteine peptidase	Recommended Dilutions: WB 1:1000-1:3000 IHC 1:150-1:600 IF 1:50-1:500
Isotype: IgG1	Calculated MW: 277 aa, 32 kDa	
Immunogen Catalog Number: AG25029	Observed MW: 32-35 kDa, 19 kDa, 17 kDa	

Applications

Tested Applications:

IF, IHC, WB, ELISA

Cited Applications:

ICC, IF, IHC, WB

Species Specificity:

Human, mouse, rat

Cited Species:

canine, chicken, human, mouse, pig, plant, rat

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, NIH/3T3 cells, HepG2 cells, HSC-T6 cells, HEK-293 cells

IHC: human breast cancer tissue, mouse liver tissue, mouse kidney tissue

IF: human breast cancer tissue,

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
Jingjing Zheng	32978798	Ann N Y Acad Sci	WB
Chenxia Juan	30243953	Int J Biochem Cell Biol	WB
Zhi Hu	34536390	Exp Cell Res	WB

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

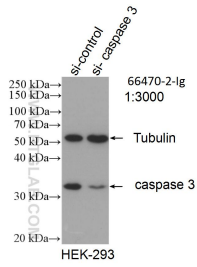
For technical support and original validation data for this product please contact:

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

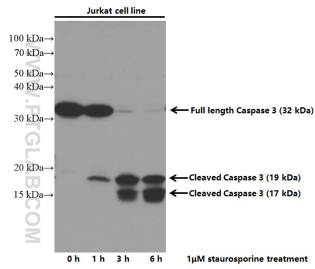
E: proteintech@ptglab.com
W: ptglab.com

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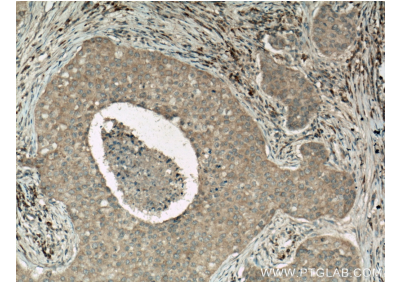
Selected Validation Data



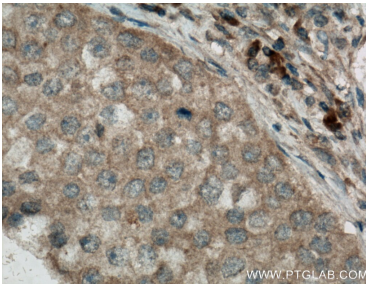
WB result of Caspase 3 antibody (66470-2-Ig; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Caspase 3 transfected HEK-293 cells.



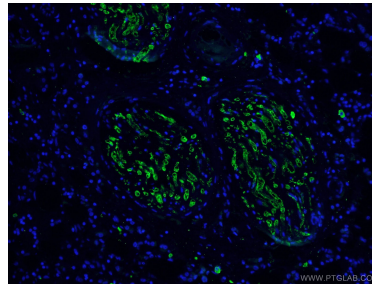
Untreated and Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 66470-2-Ig (CASP3 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66470-2-Ig (CASP3 antibody) at dilution of 1:300 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66470-2-Ig (CASP3 antibody) at dilution of 1:300 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human breast cancer tissue using 66470-2-Ig (CASP3 antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).