For Research Use Only

Caspase 3/P17/P19 Monoclonal antibody

Catalog Number:66470-2-Ig Featured Product 302 Publications

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Basic Information

Catalog Number:
66470-2-Ig

Size:
150ul , Concentration: 1500 ug/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG25029

GenBank Accession Number:
BC016926

GeneID (NCBI):
836

UNIPROT ID:
P42574

Full Name:
caspase 3, apoptosis-related cysteine peptidase

Calculated MW:
277 aa, 32 kDa

Observed MW:
32-35 kDa, 19 kDa, 17 kDa

Purification Method:
Protein G purification

CloneNo.:
2G4B2

Recommended Dilutions:
WB 1:1000-1:3000
IHC 1:150-1:600
IF/ICC 1:200-1:800

Applications

Tested Applications:
WB, IHC, IF/ICC, ELISA

Cited Applications:
WB, IHC, IF, ICC

Species Specificity:
human, mouse

Cited Species:
human, mouse, rat, pig, canine, chicken, plant

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

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

IF/ICC : HepG2 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
Jingjing Zheng	32978798	Ann N Y Acad Sci	WB
Yang Liu	36149580	Cell Stress Chaperones	WB
Yaling Zhang	36233452	J Clin Med	IF

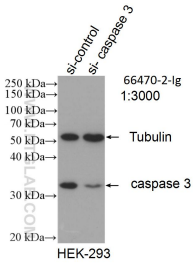
Storage

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

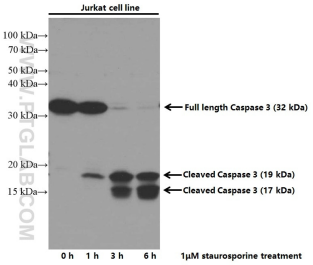
*** 20ul sizes contain 0.1% BSA

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

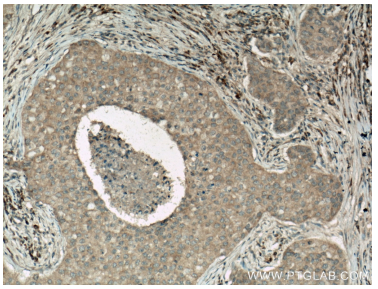
Selected Validation Data



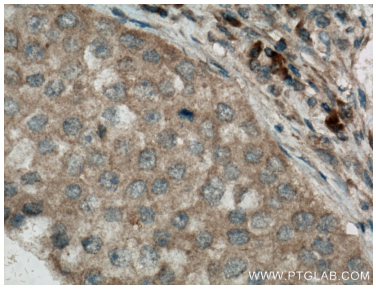
WB result of Caspase 3 antibody (66470-2-Ig; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Caspase 3 transfected HEK-293 cells.



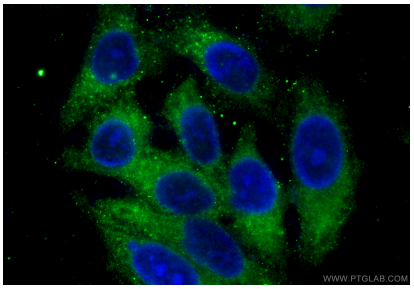
Untreated and Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 66470-2-Ig (CASP3 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



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 (-20°C Ethanol) fixed HepG2 cells using Caspase 3/p17/p19 antibody (66470-2-Ig, Clone: 2G4B2) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002).