

For Research Use Only

Caspase 3/P17/P19 Monoclonal antibody

Catalog Number: 66470-2-Ig

Featured Product

352 Publications



Basic Information

| | | |
|---|--|---|
| Catalog Number: 66470-2-Ig | GenBank Accession Number: BC016926 | Purification Method: Protein G purification |
| Size: 150ul, Concentration: 1659 ug/ml by 836 Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard; | GeneID (NCBI): 836 | CloneNo.: 2G4B2 |
| Source: Mouse | UNIPROT ID: P42574 | Recommended Dilutions: WB: 1:1000-1:3000 IHC: 1:150-1:600 IF/ICC: 1:200-1:800 |
| Isotype: IgG1 | Full Name: caspase 3, apoptosis-related cysteine peptidase | |
| Immunogen Catalog Number: AG25029 | Calculated MW: 277 aa, 32 kDa | |
| | Observed MW: 32-35 kDa, 19 kDa, 17 kDa | |

Applications

| | |
|--|---|
| Tested Applications: WB, IHC, IF/ICC, ELISA | Positive Controls: |
| Cited Applications: WB, IHC, IF | WB: Jurkat cells, HEK-293 cells, HepG2 cells, NIH/3T3 cells |
| Species Specificity: human, mouse | IHC: human breast cancer tissue, mouse liver tissue, mouse kidney tissue |
| Cited Species: human, mouse, rat, pig, canine, chicken, plant | IF/ICC: HepG2 cells, |
| Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0 | |

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 |
| Genquan Yue | 31702026 | Mol Med Rep | WB |
| Yang Liu | 36149580 | Cell Stress Chaperones | WB |

Storage

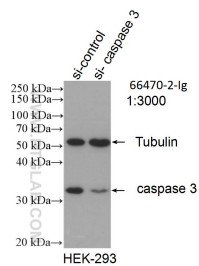
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

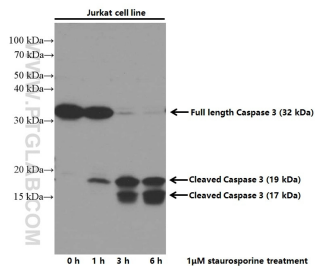
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

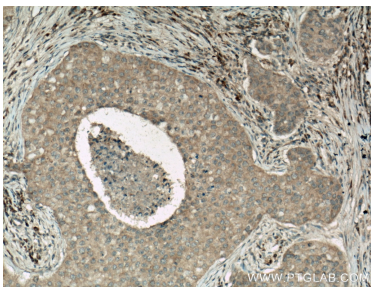
Selected Validation Data



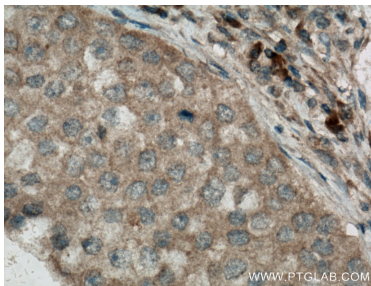
WB result of Caspase 3 antibody (66470-2-Ig; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Caspase 3 transfected HEK-293 cells.



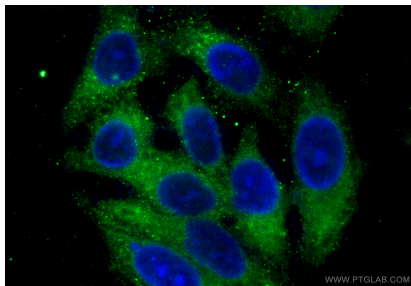
Untreated and Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 66470-2-Ig (CASP3 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



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).