For Research Use Only

Caspase 3(human specific) Monoclonal antibody

Catalog Number:66470-1-Ig 72 Publications

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Basic Information

Catalog Number:
66470-1-Ig

Size:
1000 μg/ml

Source:
Mouse

Isotype:
IgG2b

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.:
1E7F9

Recommended Dilutions:
WB 1:500-1:2000
IHC 1:100-1:400
IF/ICC 1:50-1:500

Applications

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

Cited Applications:
WB, IHC, IF

Species Specificity:
human

Cited Species:
human, mouse, rat, pig, zebrafish, sheep, cow

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

IHC : human breast cancer tissue,

IF/ICC : HeLa cells,

Background Information

Casp3 (caspase 3), also named as CPP32, SCA-1 and Apopain, belongs to the peptidase C14A family. Caspase 3 is involved in the activation cascade of caspases responsible for apoptosis execution. At the onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-|-Gly-217' bond. Caspase 3 cleaves and activates sterol regulatory element binding proteins (SREBPs) between the basic helix-loop-helix leucine zipper domain and the membrane attachment domain. Cleaves and activates caspase-6, -7 and -9. CASP3 is involved in the cleavage of huntingtin. This antibody is specific for human caspase 3, it can recognize the 32 kDa pro-caspase 3 as well as 17 and 19 kDa cleaved-caspase 3.

Notable Publications

Author	Pubmed ID	Journal	Application
Junxia Hu	31580970	Biomed Pharmacother	WB
Genquan Yue	31702026	Mol Med Rep	WB
Ruizhi Yao	30231545	Int J Mol Sci	WB

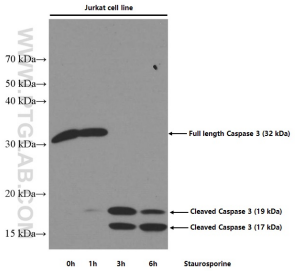
Storage

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

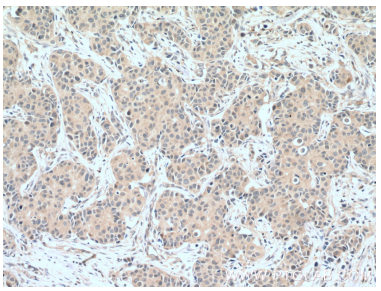
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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

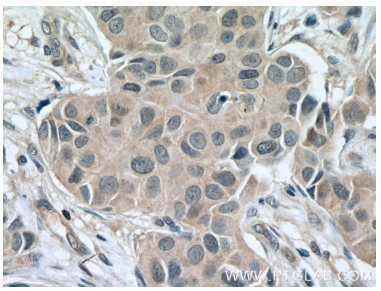
Selected Validation Data



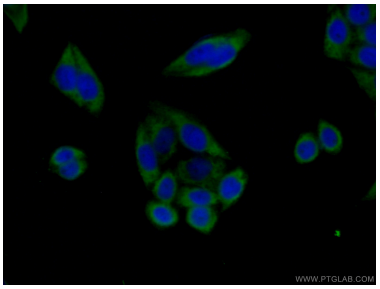
Untreated and Staurosporine treated Jurkat cells were subjected to SDS PAGE followed by western blot with 66470-1-Ig (CASP3(human specific) antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 66470-1-Ig (CASP3(human specific) antibody at dilution of 1:200 (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 66470-1-Ig (CASP3(human specific) antibody at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using 66470-1-Ig (Caspase 3(human specific) antibody) at dilution of 1:100 and CoraLite488-Conjugated Goat Anti-Mouse IgG(H+L).