

## Caspase-3 Recombinant Rabbit Monoclonal Antibody Product Datasheet

Catalog# BX00082

Clone# RR686

**Predicted Molecular Wt:** 32/17kDa

**Purity:** ProA affinity purified IgG

**Species Cross-reactivity:** Human

**Form:** Liquid

*Species cross-reactivity determined by WB*

**Swissprot ID:** P42574

**Applications:** WB IF/ICC FC IP

### Background:

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. 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. Involved in the cleavage of huntingtin. Triggers cell adhesion in sympathetic neurons through RET cleavage. Catalytic activityi Strict requirement for an Asp residue at positions P1 and P4.

### Immunogen:

A synthetic peptide corresponding to aa1-100 of human Caspase-3 was used as an immunogen.

### Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

### Storage conditions:

-20°C.

### Storage instructions:

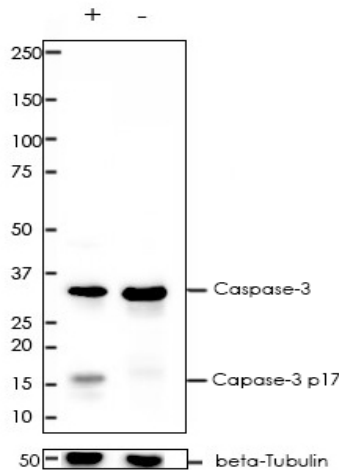
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

### Recommended Dilutions:

WB: 1:1,000 - 1:2,000  
 IF/ICC: 1:200 - 1:800  
 FC: 1:200 - 1:1,000  
 IP: 1:50

### Background References:

1. Cabrera S et al. Autophagy 11:670-84 (2015).
2. Frazzi R et al. Int J Cancer : (2012).



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All lanes: Anti-Caspase-3 antibody at 1:2,000 dilution

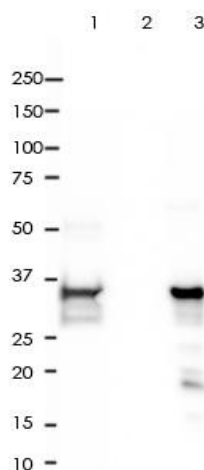
Predicted MW: 32/17 kDa  
 Observed MW: 35/17 kDa

Lane +: Jurkat treated with 1 uM staurosporine for 4h  
 Lane -: Jurkat untreated

Lysate at 20 µg per lane  
 2nd Ab:  
 GAR HRP(H+L) 1:5,000

Exposure: 20s

*This antibody is specific for the pro form and the p17 cleaved form of human Caspase-3.*

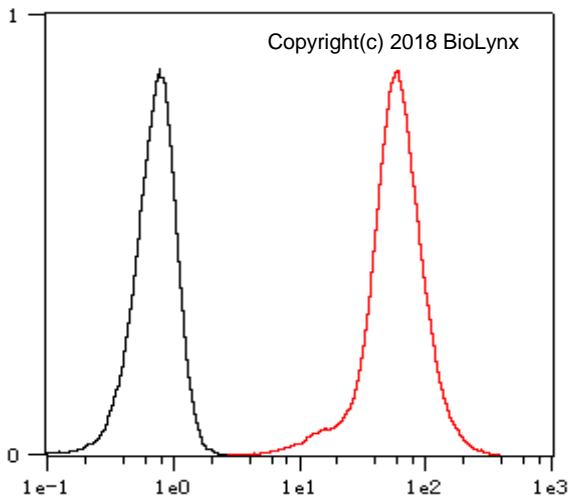


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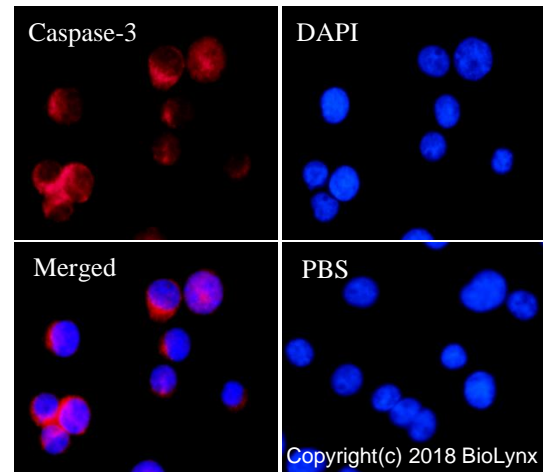
Caspase-3 was immunoprecipitated from 0.4mg of Jurkat whole cell lysate with RR686 at 1:50 dilution.  
 2nd Ab:  
 GAR HRP for IP 1:500

Lane 1: RR686 IP in Jurkat whole cell lysate  
 Lane 2: PBS instead of RR686 in Jurkat whole cell lysate  
 Lane 3: Jurkat whole cell lysate, 10 µg (input)

Exposure: 30s



Overlay histogram showing Ramos cells stained with RR686 (Red). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR686, 1:1,000 dilution) in 1x PBS/1% BSA for 30 min at room temperature. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at room temperature. Unlabelled sample (Black) was used as a control.



RR686 staining Caspase-3 in Jurkat cells by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:800) at 4°C. An Alexa Fluor® 594-conjugated Goat Anti-Rabbit IgG polyclonal was used as the secondary antibody (1:500). DAPI (blue) was used as the nuclear counter stain.

Control: PBS and secondary antibody, An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG (1:500).

Product QC'd by:



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