

# Product Data Sheet

## Purified anti-Caspase-3

**Catalog # / Size:** 622701 / 25 µg  
622702 / 100 µg

**Clone:** 4-1-18

**Isotype:** Mouse IgG2a, κ

**Immunogen:** Recombinant full length human protein

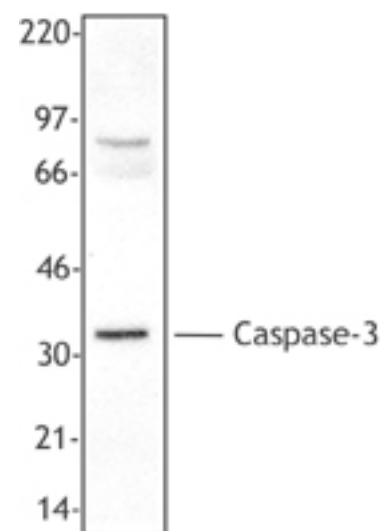
**Reactivity:** Human, recognizes 32 kD pro-caspase-3 and 17 kD cleaved caspase-3

**Preparation:** The antibody was purified by affinity chromatography.

**Formulation:** This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. Final antibody concentration is 0.5 mg/ml.

**Concentration:** 0.5 mg/ml

**Storage:** Upon receipt, store at 4°C.



Jurkat cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with mouse anti-caspase 3 (clone 4-1-18). Proteins were visualized using a goat anti-mouse secondary conjugated to HRP and a chemiluminescence detection system.

## Applications:

**Applications:** WB

**Recommended Usage:** Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 5 µg antibody per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.

**Application References:** 1. Fei Q, *et al.* 2008. *J. Biol Chem.* 283:3357. PubMed  
2. Kis-Toth K, *et al.* 2011. *J. Immunol.* 187:1222. PubMed.

**Description:** Caspase 3 (also known as cpp32, Apopain, Yama, and PARP cleavage protease) is a member of the peptidase family C14. This cytoplasmic caspase functions as a heterotetramer and has two isoforms (one acts as a dominant negative inhibitor). The pro-form of this caspase is approximately 32 kD. Caspase 3 is involved in the caspase activation cascade responsible for apoptosis execution. This caspase cleaves/activates SREBPs, Caspase 6, Caspase 7, and Caspase 9. Caspase 3 is inhibited by c-IAP1, c-IAP2, XIAP, survivin, and Livin and activated by Caspase 6, -8, and -10, granzyme B, Apaf-1 by cleavage into large p17 and small p12 subunits. Active heterodimers form between the large p17 subunit and small p11 subunit of Caspase 7 and vice versa. Caspase 3 has been shown to cleave PARP, huntingtin, androgen receptor, atrophin-1, DNA- PKcs, D4-GDI, hnRNPs C1/C2, U1snRNP, PKC delta, ATM, fodrin, gelsolin, ICAD, RIP, X-IAP, STAT1, topoisomerase I, vimentin, Rb, lamin B, mdm2, and β-catenin. The 4-1-18 monoclonal antibody has been shown to be useful for Western blotting of human caspase 3 (32 kD pro-caspase and 17 kD cleaved caspase).

**Antigen References:** 1. Goldberg Y, *et al.* 1996. *Nat. Genet.* 13:442.  
2. Fernandes-Alnemri T, *et al.* 1996. *P. Natl. Acad. Sci. USA* 93:7464.  
3. Slee E, *et al.* 2001. *J. Biol. Chem.* 276:7320.  
4. Woo M, *et al.* 2003. *Nat. Immunol.* 4:1016.

### Related Products: Product

Purified anti-human CD95 (FAS)  
Purified anti-human CD95 (FAS)  
HRP Goat anti-mouse IgG (minimal x-reactivity)  
Purified anti-Caspase-14  
Purified anti-Cytochrome c  
Biotin anti-Caspase-3  
Purified anti-PARP  
Purified anti-Cytochrome c  
Purified anti-Cytochrome c  
Purified anti-Caspase-8  
Purified anti-Caspase-6  
Purified anti-Caspase-7  
Purified anti-Caspase-9  
Purified anti-BAD  
Purified anti-Bcl-2

### Clone

DX2  
EOS9.1  
Poly4053  
14-1-71  
2.7D5  
4-1-18  
5A5  
6H2.B4  
7H8.2C12  
4-1-20  
Mono6217  
Mono6218  
96-2-22  
Poly6117  
Poly6119

### Application

FC, IF, IHC  
FC  
ELISA, IHC, WB  
WB  
FC  
WB  
IF, WB  
IP, ICFC, IF, ICC  
WB  
WB  
WB  
WB  
IP, WB  
WB  
IF, WB



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Purified anti-BIK  
Purified anti-Survivin

Poly6120  
Poly6147

WB  
WB



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