

Biotin anti-Caspase-3

Catalog # / Size: 622704 / 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, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

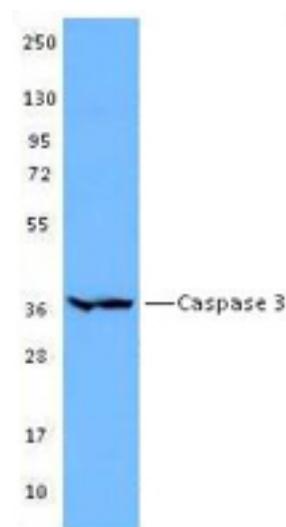
Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. **Do not freeze.**

Applications:

Applications: WB - *Quality tested*

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.



Jurkat cell extract was resolved by electrophoresis, transferred to nitrocellulose, and probed with Biotin anti-Caspase 3 antibody (clone 4-1-18). Proteins were visualized using an HRP-conjugated Streptavidin and chemiluminescence detection.

Description: Caspase 3 (also known as cyp32, 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.



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.