



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

#9915 Store at -20C

Apoptosis Antibody Sampler Kit

1 Kit (8 x 20 microliters)

For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
Caspase-3 (D3R6Y) Rabbit mAb	14220	20 µl	35, 19, 17 kDa	Rabbit IgG
Cleaved Caspase-3 (Asp175) (5A1E) Rabbit mAb	9664	20 µl	17, 19 kDa	Rabbit IgG
PARP Antibody	9542	20 µl	89, 116 kDa	Rabbit
Cleaved PARP (Asp214) (D64E10) XP [®] Rabbit mAb	5625	20 µl	89 kDa	Rabbit IgG
Caspase-9 (C9) Mouse mAb	9508	20 µl	47/37/35 (H), 49/39/37 (M), 51/40/38 (R). kDa	Mouse IgG1
Cleaved Caspase-9 (Asp330) (E5Z7N) Rabbit mAb	52873	20 µl	37 kDa	Rabbit IgG
Caspase-7 (D2Q3L) Rabbit mAb	12827	20 µl	20, 35 kDa	Rabbit IgG
Cleaved Caspase-7 (Asp198) (D6H1) Rabbit mAb	8438	20 µl	18 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat
Anti-mouse IgG, HRP-linked Antibody	7076	100 µl		Horse

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

Description

The Apoptosis Antibody Sampler Kit provides an economical means to evaluate the levels of inactive and active caspases. The kit contains enough primary and secondary antibodies to perform two Western blot experiments with each antibody.

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Background

Apoptosis is a regulated physiological process leading to cell death. Caspases, a family of cysteine acid proteases, are central regulators of apoptosis. Initiator caspases (including 8, 9, 10, and 12) are closely coupled to proapoptotic signals. Once activated, these caspases cleave and activate downstream effector caspases (including 3, 6, and 7), which in turn cleave cytoskeletal and nuclear proteins like PARP, α-fodrin, DFF, and lamin A and induce apoptosis. Cytochrome c released from mitochondria is coupled to the activation of caspase-9, a key initiator caspase (1). Proapoptotic stimuli include FasL, TNF-α, DNA damage and ER stress. Fas and TNFR activate caspase-8 and -10 (2), DNA damage leads to the activation of caspase-9 and ER stress leads to the calcium-mediated activation of caspase-12 (3). The inhibitor of apoptosis protein (IAP) family includes XIAP and survivin and functions by binding and inhibiting several caspases (4,5). Smac/Diablo, a mitochondrial protein, is released into the cytosol upon mitochondrial stress and competes with caspases for binding of IAPs. The interaction of Smac/Diablo with IAPs relieves the inhibitory effects of IAPs on caspases (6).

Background References

1. Baker, S.J. and Reddy, E.P. (1998) *Oncogene* 17, 3261-3270.
2. Budihardjo, I. et al. (1999) *Annu. Rev. Cell Dev. Biol.* 15, 269-290.
3. Nakagawa, T. et al. (2000) *Nature* 403, 98-103.
4. Deveraux, Q. L. et al. (1998) *EMBO J.* 17, 2215-2223.
5. Li, F. et al. (1998) *Nature* 396, 580-584.
6. Du, C. et al. (2000) *Cell* 102, 33-42.

Trademarks and Patents

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.

All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.