Store at -20°C

# PhosphoPlus® Caspase-3 (Cleaved, Asp175) Antibody Duet

#8202

Cell Signaling TECHNOLOGY®

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**Entrez-Gene ID** #836
**UniProt ID** #P42574

**For Research Use Only. Not For Use In Diagnostic Procedures.**

| Products Included | Product # | Quantity | Mol. Wt. | Isotype/Source |
|---|---|---|---|---|
| Cleaved Caspase-3 (D175) (5A1E) Rabbit mAb | 9664 | 100 µl | 17, 19 kDa | Rabbit IgG |
| Caspase-3 (D3R6Y) Rabbit mAb | 14220 | 100 µl | 17, 19, 35 kDa | Rabbit IgG |

**See www.cellsignal.com for individual component applications, species cross-reactivity, dilutions, and additional application protocols.**

**Description:** PhosphoPlus® Duets from Cell Signaling Technology (CST) provide a means to assess protein activation status. Each Duet contains an activation-state and total protein antibody to your target of interest. These antibodies have been selected from CST's product offering based upon superior performance in specified applications.

**Background:** Caspase-3 (CPP-32, Apoptain, Yama, SCA-1) is a critical executioner of apoptosis, as it is either partially or totally responsible for the proteolytic cleavage of many key proteins, such as the nuclear enzyme poly (ADP-ribose) polymerase (PARP) (1). Activation of caspase-3 requires proteolytic processing of its inactive zymogen into activated p17 and p12 fragments. Cleavage of caspase-3 requires the aspartic acid residue at the P1 position (2).

**Specificity/Sensitivity:** Caspase-3 (D3R6Y) Rabbit mAb recognizes endogenous levels of total caspase-3 protein. This antibody detects full-length caspase-3 as well as the large subunit (p20) of caspase-3 resulting from cleavage during apoptosis. Cleaved Caspase-3 (Asp175) (5A1) Rabbit mAb detects endogenous levels of the large fragment (17/19 kDa) of activated caspase-3 resulting from cleavage adjacent to Asp175. This antibody does not recognize full length caspase-3 or other cleaved caspases. Non-specific labeling may be observed by immunofluorescence in specific sub-types of healthy cells in fixed-frozen tissues (e.g. pancreatic alpha-cells). Cytoplasmic background may be observed in human and monkey samples.

**Source/Purification:** Monoclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino-terminal residues adjacent to Asp175 of human caspase-3, or with recombinant protein specific to the p20 subunit of human caspase-3 protein.caspase-3.

**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 References:**

(1) Fernandes-Alnemri, T. et al. (1994) *J Biol Chem* 269, 30761-4.

(2) Nicholson, D.W. et al. (1995) *Nature* 376, 37-43.



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**Applications:** **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide **Species Cross-Reactivity:** **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.