Cleaved Drosophila Dcp-1 (Asp216) Antibody

Applications | Species Cross-Reactivity* | Molecular Wt. | Source | Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino-terminal residues adjacent to Asp216 of Drosophila Dcp-1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

**Background**: Cell death in the fruit fly Drosophila melanogaster is regulated by many of the same stimuli as mammalian cell death (1). The Drosophila genome contains seven caspase genes; three encode initiator caspases, and four encode effector caspases (reviewed in (2)). The Drosophila effector caspase, death caspase-1 (Dcp-1), is a critical executioner of apoptosis. It is involved in the proteolytic cleavage of many key proteins, such as the nuclear enzyme poly (ADP-ribose) polymerase (PARP). The activation of Dcp-1 requires proteolytic processing of its inactive zymogen into active p22 and p13 fragments (3). Comparison of the in vivo activity between DrICE and Dcp-1 has shown that DrICE is a more effective inducer of apoptosis than Dcp-1, which instead plays a role in determining the rate of cell death (4).

**Specificity/Sensitivity**: Cleaved Drosophila Dcp-1 (Asp216) Antibody recognizes endogenous levels the large 22 kDa fragment of cleaved Dcp-1. This antibody does not recognize full length Dcp-1. The antibody also detects a non-specific, apoptotic-related band at 50 kDa.

**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.

**Recommended Antibody Dilutions**:
- Western blotting 1:1000
- Immunofluorescence (IF-IC) 1:100

For product specific protocols please see the web page for this product at www.cellsignal.com.

**IMPORTANT**: For western blots, incubate membrane with diluted antibody in 5% w/v BSA, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

Confocal immunofluorescent analysis of wild-type (white1118) Drosophila egg chambers, conditioned (left) or conditioned followed by starvation (right), using Cleaved Drosophila Dcp-1 (Asp216) Antibody (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

Western blot analysis of extracts from Drosophila S2 cells, untreated (-) or treated with either cycloheximide (10 μM, 5 hr; +) or actinomycin D (0.7 μM, 5 hr; +), using Cleaved Drosophila Dcp-1 (Asp216) Antibody.

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Entrez-Gene ID: #37729
UniProt ID: #O02002

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Confocal immunofluorescent analysis of S2 cells, untreated (left) or treated with Actinomycin D (0.7 uM, 20 hr; right), using Cleaved Drosophila Dcp-1 (Asp216) Antibody (green). Actin filaments were labeled with DyLight™ 554 Phalloidin #13054 (red). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).