Revision 10

#9578 Store at -20C

Cleaved Drosophila Dcp-1 (Asp215) Antibody

Cell Signaling TECHNOLOGY®

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IF-IC	Dm	Endogenous	22	Rabbit	#O02002	37729

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunofluorescence (Immunocytochemistry)	1:800

Storage

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

Specificity / Sensitivity

Cleaved Drosophila Dcp-1 (Asp215) Antibody recognizes endogenous levels of 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 by western blot.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino-terminal residues adjacent to Asp215 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).

Background References

1. Steller, H. et al. (1994) *Philos Trans R Soc Lond B Biol Sci* 345, 247-50.
2. Hay, B.A. and Guo, M. (2006) *Annu Rev Cell Dev Biol* 22, 623-50.
3. Song, Z. et al. (1997) *Science* 275, 536-40.
4. Florentin, A. and Arama, E. (2012) *J Cell Biol* 196, 513-27.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

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

Applications Key

WB: Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **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
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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Limited Uses

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