Revision 1

Store at -20C

#9731

Cleaved DFF45 (Asp224) Antibody

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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H	Endogenous	12	Rabbit	#O00273	1676

Product Usage Information

Application	Dilution
Western Blotting	1:1000

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 DFF45 (Asp224) Antibody detects the carboxy-terminal fragment of DFF45 resulting from cleavage at aspartic acid 224. The antibody does not recognize full length DFF45 or other cleavage products of DFF45.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to carboxy-terminal residues surrounding Asp224 of human DFF45. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Human DFF45 and its mouse homologue ICAD function in normal cells as chaperones for caspase-activated deoxyribonuclease (DFF40 or CAD) during its synthesis (1). The association of DFF45 (or its isoform DFF35) with DFF40 inhibits the DNAse activity of the latter (1-4). In vitro, DFF45 has been shown to be the target of several caspases, including caspase-3, -6, -7, -8 and granzyme B (3). In vivo, caspase-3 is believed to be the primary enzyme responsible for processing DFF45 and release of its carboxy-terminal fragment (3,5). The cleavage of DFF45 inactivates its inhibitory function on DFF40 and causes nuclear DNA degradation by DFF40, leading to cell death (6,7).
(This product is sold under license from Promega Corp., U.S. Patent No. 6,350,452.)

Background References

1. Enari, M. et al. (1998) *Nature* 391, 43-50.
2. Sakahira, H. et al. (1998) *Nature* 391, 96-99.
3. Wolf, B. B. et al. (1999) *J. Biol. Chem.* 274, 30651-30656.
4. Gu, J. et al. (1999) *J. Biol. Chem.* 274, 20759-20762.
5. Tang, D. and Kidd, V.J. (1998) *J. Biol. Chem.* 273, 28549-28552.
6. Liu, X. et al. (1999) *J. Biol. Chem.* 274, 13836-13840.
7. Zhang, J. et al. (1999) *J. Biol. Chem.* 274, 37450-37454.

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

W: Western Blotting

Cross-Reactivity Key

H: Human

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