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Product Information

Anti-CIDE-A, C-Terminal
produced in rabbit, affinity isolated antibody

Catalog Number **C7987**

Product Description

Anti-CIDE-A (cell death-inducing DFF-like effector A), C-Terminal is produced in rabbit using as immunogen a peptide corresponding to amino acids 200-217 of human CIDE-A[1]. It is purified by immunoaffinity chromatography.

Anti-CIDE-A, C-Terminal recognizes human CIDE-A, ~23 kDa, by immunoblotting. The antibody shows no cross-reactivity to CIDE-B.

Apoptosis is related to many diseases and induced by a family of death receptors and their ligands. Cell death signals are transduced by death domain (DD), death effector domain (DED), caspase recruitment domain (CARD) containing molecules, and members of the caspase family of proteases. These death signals result in chromosomal DNA degradation by DNase DFF40/ICAD, which is chaperoned and inhibited by DFF45/ICAD.[2,3]

CIDE-A and CIDE-B, cell death-inducing DFF-like effector A and B, are novel DFF-related proteins.[1] DFF45/ICAD inhibits the apoptotic activities of CIDE-A and CIDE-B. The region of CIDE-A with homology to DFF45 is located in the N-terminus and required for DFF45 to inhibit CIDE-A induced apoptosis.[1] CIDE contains a type of domain termed CIDE-N, which has high homology with the regulatory domains of DFF45/ICAD and DFF40/ICAD.[1,4] CIDE-A and CIDE-B induce DNA fragmentation and activate apoptosis in mammalian cells. CIDE-A is expressed in many tissues including brain.

Reagent

Supplied at ~0.5 mg/ml in phosphate buffered saline containing 0.02% sodium azide.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Antibody can be stored at 2-8 °C for three months and at −20 °C for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Product Profile

Immunoblotting: the recommended working antibody dilution is 1:1,000 to 1:2,000 using human brain tissue lysate.

Note: In order to obtain the best results and assay sensitivities in various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Inohara, N., et al., CIDE, a novel family of cell death activators with homology to the 45 kDa subunit of the DNA fragmentation factor. *EMBO J.*, **17,** 2526-2533 (1998).
2. Enari, M., et al., A caspase-activated DNase that degrades DNA during apoptosis, and its inhibitor ICAD. Nature, **391**, 43-50 (1998).
3. Sakahira, H., et al., Cleavage of CAD inhibitor in CAD activation and DNA degradation during apoptosis. *Nature*, **391**, 96-99 (1998).
4. Lugovskoy, A.A., et al., Solution structure of the CIDE-N domain of CIDE-B and a model for CIDE-N/CIDE-N interactions in the DNA fragmentation pathway of apoptosis. *Cell*, **99**, 747-755 (1999).

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