Catalog No. LF-PA0058

POLYCLONAL ANTIBODY

Anti-ICAD
(Anti-Inhibitor of CAD, DFF45)

Background : The inhibitor of caspase-3-activated DNase (ICAD) is a caspase-3 substrate that controls nuclear apoptosis. ICAD has two isoforms: a functional isoform of M.W. 45kDa, ICAD-L/DNA fragmentation factor (DFF) 45; and a M.W.35kDa isoform, ICAD-S/DFF35. Although both ICAD-L and ICAD-S can bind and inhibit CAD, only ICAD-L was reported to be functional. ICAD is cleaved to be inactivated and allow caspase-activated DNase (CAD) to execute nuclear internucleosomal apoptotic DNA fragmentation. In non-apoptotic cells, CAD is complexed with its inhibitor, ICAD. The activation of the CAD/ICAD complex occurs through the caspase 3-mediated cleavage of ICAD at residues 117 and 224, which results in three ICAD fragments that are then released from CAD. In addition to its DNase inhibitory activity, ICAD acts as a CAD-specific folding chaperone. There are recent reports that ICAD is a potential target for restoring a normal apoptotic signal transduction pathway in colon and brain cancer cells.

Immunogen : Synthetic peptide

Host : Rabbit

Type : Purified

Isotype : IgG

Size : 100㎕

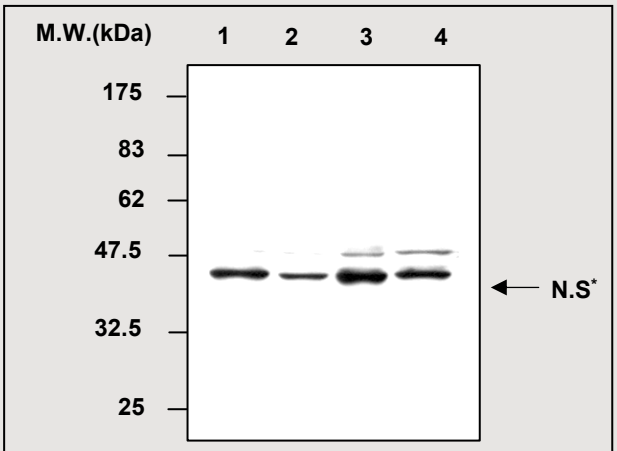
Composition : PBS containing 50% glycerol

Positive control : HeLa cell lysate

Storage : Store for 1 year at –20℃ from date of shipment

Species cross reactivity

Human	Mouse	Rat
+	-	-



Immunoblot Analysis of cell lysates
Lane 1 : HeLa cell lysate
Lane 2 : Jurkat cell lysate
Lane 3 : 293T cell lysate
Lane 4 : A431 cell lysate

* N.S : Non-Specific band

Applications :

Western blotting (1:2,000)
Immunoprecipitation was not tested

Background Reference :

1) Enari M et al, Nature. 1998; vol.391(6662): pp.43-50.

2) Sakahira H et al, J Biol Chem. 1999; vol.274(22): pp.15740-4.

3) Charrier L et al, Cancer Res. 2002; vol.62(7): pp.2169-74.

4) Fukushima K et al, J Mol Biol. 2002; vol.321(2): pp.317-27.

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