Catalog No. LF-PA0057

POLYCLONAL ANTIBODY

Anti-CAD
(Anti-Caspase-activated Dnase, DFF40)

Background : CAD (caspase-activated DNase), a 40kDa nuclear protein, is primarily responsible for cell-autonomous DNA degradation during apoptosis. CAD is present in healthy cells where it is held in an inactive state through the association with its inhibitor ICAD. The ICAD protein is inactivated in apoptotic cells via caspase-3 cleavage thereby releasing CAD, which subsequently cleaves chromosomal DNA. CAD is a magnesium-dependent endonuclease specific for double stranded DNA that generates double strand breaks with 3'-hydroxyl ends. The nuclease preferentially attacks chromatin in the internucleosomal linker DNA. However, the nuclease hypersensitive sites can be detected and CAD is potentially involved in large-scale DNA fragmentation as well. CAD-mediated DNA fragmentation triggers chromatin condensation that is another hallmark of apoptosis.

Immunogen : Synthetic peptide

Host : Rabbit

Type : Purified

Isotype : IgG

Size : 100㎕

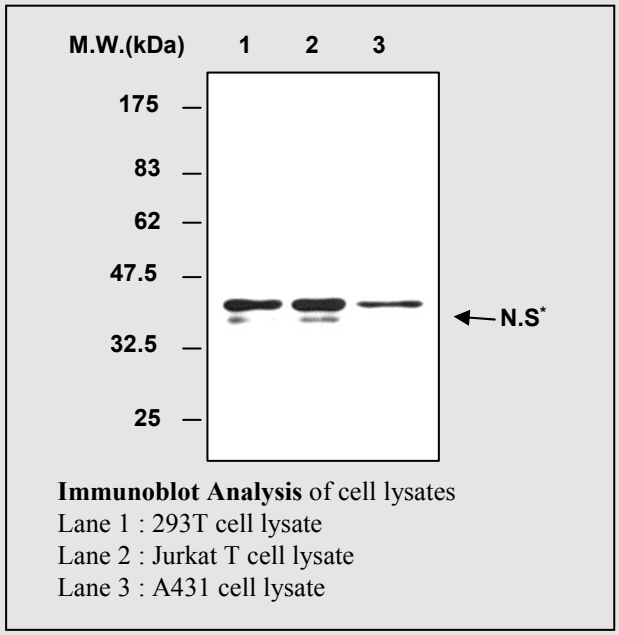
Composition : PBS containing 50% glycerol

Positive control : 293T 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 : 293T cell lysate
Lane 2 : Jurkat T cell lysate
Lane 3 : A431 cell lysate

* N.S : Non-Specific band

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

Background Reference :

1) Nagata S Annu Rev Immunol. 2005;vol.23: pp.853-75.

2) Nagata S et al, Cell Death Differ. 2003; vol.10(1): pp.108-16.

3) Widlak P Acta Biochim Pol. 2000; vol.47(4): pp.1037-44.

4) Degen WG et al, Cell Death Differ. 2000; vol.7(7): pp.616-27.

Gentaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium
http://www.gentaur-worldwide.com