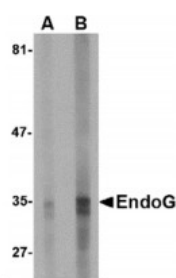




EndoG Antibody [7G1G10]

CATALOG NUMBER: PM-4579



Western blot analysis of EndoG expression in HepG2 cell lysate with EndoG antibody at (A) 5 and (B) 10 ug/mL.

Specifications

SPECIES REACTIVITY:	Human, Rat
TESTED APPLICATIONS:	ELISA, WB
APPLICATIONS:	EndoG monoclonal antibody can be used for detection of EndoG by Western blot at 5 - 10 ug/mL.
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.
POSITIVE CONTROL:	1) Cat. No. 1211 - HepG2 Cell Lysate 2) Cat. No. 95-103 - EndoG Recombinant Protein
IMMUNOGEN:	Recombinant protein corresponding to amino acids 51 - 140 of human EndoG.
HOST SPECIES:	Mouse

Properties

PURIFICATION:	EndoG Monoclonal Antibody is immunoaffinity chromatography purified IgG.
PHYSICAL STATE:	Liquid
BUFFER:	EndoG Monoclonal Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	EndoG monoclonal antibody can be stored at -20°C, stable for one year.
CLONALITY:	Monoclonal
ISOTYPE:	IgG1
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	EndoG Antibody [7G1G10] : Endo G
ACCESSION NO.:	Q14249
PROTEIN GI NO.:	24638471
OFFICIAL SYMBOL:	ENDO G
GENE ID:	2021

Background

BACKGROUND:

EndoG Monoclonal Antibody: The fragmentation of nuclear DNA is a hallmark of apoptotic cell death. The activities of caspase and nuclease are involved in the DNA fragmentation. Caspase-activated deoxyribonuclease (CAD), also termed DNA fragmentation factor (DFF40), is one such nuclease, and is capable of inducing DNA fragmentation and chromatin condensation after cleavage by caspase-3 of its inhibitor ICAD/DFF45. Caspase and CAD independent DNA fragmentation also exists. Recent studies demonstrated that another nuclease, endonuclease G (EndoG), is specifically activated by apoptotic stimuli and is able to induce nucleosomal fragmentation of DNA independently of caspase and DFF/CAD. EndoG is a mitochondrion-specific nuclease that translocates to the nucleus and cleaves chromatin DNA during apoptosis. The homologue of mammalian EndoG is the first mitochondrial protein identified to be involved in apoptosis in *C. elegans*. EndoG also cleaves DNA in vitro.

REFERENCES:

- 1) Li LY, Luo X, Wang X. Endonuclease G is an apoptotic DNase when released from mitochondria. Nature 2001; 412:95-9.
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- 3) Hengartner MO. Apoptosis. DNA destroyers. Nature 2001; 412:27, 29.
- 4) Widlak P, Li LY, Wang X, et al. Action of recombinant human apoptotic endonuclease G on naked DNA and chromatin substrates: cooperation with exonuclease and DNase I. J. Biol. Chem. 2001; 276:48404-9.

FOR RESEARCH USE ONLY

December 14, 2016