

EndoG antibody (pAb)

Rabbit Anti-Human/Mouse/Rat ATR (Anthrax toxin receptor, tumor endothelial marker 8, TEM8; CT)

Instruction Manual

Catalog Number	PK-AB718-3035
Synonyms	EndoG Antibody:
Description	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 <i>C. elegans</i> . EndooG also cleaves DNA in vitro.
Quantity	100 µg
Source / Host	Rabbit
Immunogen	Rabbit polyclonal EndoG antibody was raised with a synthetic peptide corresponding to 15 amino acids near the amino terminus of human EndoG (GenBank Accession number Q14249).
Purification Method	Affinity chromatography purified via peptide column
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to 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.
Applications	E, WB, IHC !Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually. EndoG antibody can be used for detection of EndoG by Western blot at 2 µg/mL. A 35 kDa band can be detected. Antibody can also be used for immunohistochemistry starting at 15 µg/mL.
Images	Available upon request.
References	Li LY, Luo X, Wang X. Endonuclease G is an apoptotic DNase when released from mitochondria. <i>Nature</i> . 2001;412(6842):95-9. Parrish J, Li L, Klotz K, Ledwich D, Wang X, Xue D. Mitochondrial endonuclease G is important for apoptosis in <i>C. elegans</i> . <i>Nature</i> . 2001;412(6842):90-4 Hengartner MO. Apoptosis. DNA destroyers. <i>Nature</i> . 2001;412(6842):27, 29. Widlak P, Li LY, Wang X, Garrard WT. Action of recombinant human apoptotic endonuclease G on naked DNA and chromatin substrates: cooperation with exonuclease and DNase I. <i>J Biol Chem</i> . 2001;276(51):48404-9.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3035P HepG2 Cell Lysate, Cat. No. PK-AB718-1211

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