

# Endonuclease G Antibody



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R	Endogenous	25, 30	Rabbit	#Q14249	2021

## Product Usage Information

### Application

Western Blotting

### Dilution

1:1000

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

## Specificity/Sensitivity

Endonuclease G Antibody detects endogenous levels of total Endonuclease G protein.

## Species predicted to react based on 100% sequence homology

Monkey

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Cys122 of human Endonuclease G. Antibodies were purified by protein A and peptide affinity chromatography.

## Background

Endonuclease G (EndoG) is a nuclear-encoded mitochondrial nuclease that has been reported to function in apoptosis, DNA recombination and cell proliferation (1-5). EndoG is expressed as a precursor protein containing an amino-terminal mitochondrial targeting sequence which is removed when the protein is imported into the mitochondria (1). During apoptosis EndoG is released from the mitochondria, translocates to the nucleus and cooperates with other nucleases to trigger DNA fragmentation associated with the apoptotic process (3,6,7).

## Background References

1. Côté, J. and Ruiz-Carrillo, A. (1993) *Science* 261, 765-769.
2. Parrish, J. et al. (2001) *Nature* 412, 90-94.
3. Li, L.Y. et al. (2001) *Nature* 412, 95-99.
4. Zhang, J. et al. (2003) *Proc. Natl. Acad. Sci. USA* 100, 15782-15787.
5. Huang, K.J. et al. (2006) *Proc. Natl. Acad. Sci. USA* 103, 8995-9000.
6. Widlak, P. et al. (2001) *J. Biol. Chem.* 276, 48404-48409.
7. Arnoult, D. et al. (2003) *EMBO J.* 22, 4385-4399.
8. Kozako, T. et al. (2015) *Sci Rep* 5, 11345.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**W:** Western Blotting

## Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat

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