

PRODUCT DATA SHEET

Bioworld Technology,Inc.

Endo G polyclonal antibody

Catalog: BS90462 Host: Rabbit Reactivity: Human

BackGround:

Endonuclease G (ENDOG), a nuclear encoded protein, localizes to the mitochondria. This sugar-nonspecific nuclease, responsible for major mitochondrial nuclease acpreferentially cleaves single-stranded tivity, DNA(ssDNA). Synthesized as a propeptide with an amino-terminal presequence that targets the nuclease to mitochondria, ENDOG translocates to neuclei on apoptotic stimulation and act as a nuclease without sequence specificity. Both exonucleases and DNase I stimulate the ability of ENDOG to generate double-stranded DNA cleavage products at physiological ionic strengths, suggesting that these activities work in concert with ENDOG in apoptotic cells to ensure efficient DNA breakdown. In addition to deoxyribonuclease activities, ENDOG also has ribonuclease (RNase) and RNase H activities. EN-DOG is capable of generating the RNA primers required by DNA polymerase gamma to initiate replication of mitochondrial DNA. ENDOG exists in the mitochondrial intermembrane space, but not in the matrix where mtDNA replication occurs. This enzyme provides an important nicking function for mitochondrial DNA specifically cleaving DNA at GC tracts. Human ENDOG maps to chromosome 9q34.11.

Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

Molecular Weight:

36 kDa

Swiss-Prot:

Q14249(Human)

Purification&Purity:

ProA affinity purified

Applications:

WB:1:500-1:1,000

ICC:1:50-1:200

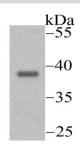
Storage&Stability:

Store at +4 $^{\circ}$ C after thawing. Aliquot store at -20 $^{\circ}$ C or -80 $^{\circ}$ C. Avoid repeated freeze / thaw cycles.

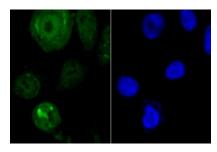
Specificity:

Endo G polyclonal antibody detects endogenous levels of Endo G protein.

DATA:



Western blot analysis of Endo G on mouse heart tissue lysate using anti-Endo G antibody at 1/500 dilution.



ICC staining Endo G in PC-3M cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformal dehyde, permeabilised with 0.25% Triton X100/PBS.

Note

For research use only, not for use in diagnostic procedure.

Bioworld Technology, Inc.

Add: 1660 South Highway 100, Suite 500 St. Louis Park,

MN 55416,USA.

Email: <u>info@bioworlde.com</u>

Tel: 6123263284 Fax: 6122933841 Bioworld technology, co. Ltd.

Add: No 9, weidi road Qixia District Nanjing, 210046,

P. R. China.

Email: <u>info@biogot.com</u>
Tel: 0086-025-68037686
Fax: 0086-025-68035151