EndoG Antibody

#Cat: NB-19-0009 Size: 0,1ml

Immunogen Data

Description: Endonuclease G activity can be isolated both from mitochondria and the nucleus (1, 2) and it release from mitochondria during apoptosis, inducing DNA degradation (3). Recently it has been reported that EndoG induces caspase-independent DNA damage in the myocardium (4).
Immunogen: Synthetic peptide derived from within the C-terminal region.
Alternative names: EndoG, FLJ27463.
UniProt ID: Q14249.
Mol. Weight: 32.6 kDa (immature), 27.7 kDa (mature, mitochondrial).

Antibody Data

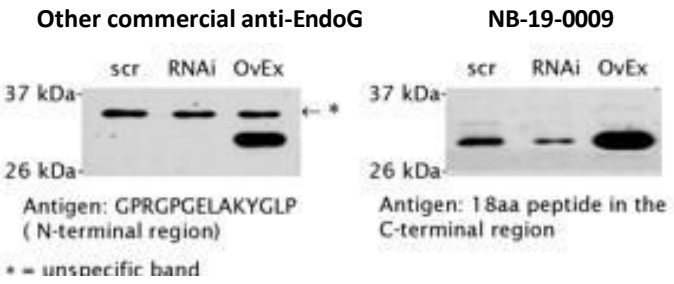
Host: Rabbit
Clonality: Polyclonal
Species Reactivity: Mouse and Rat. Predicted to react with Human (16 matches out of 18 residues in the immunogenic peptide).
Concentration: 1mg/ml **Volume:** 100 µl
Purity: Affinity-purified.
Storage Buffer: Distilled water with 0.02% sodium azide as preservative and 0,1% BSA as stabilizer.
Storage Instruction: Aliquot and store at -20ºC for short term or -80ºC for long term. Avoid freeze-thaw cycles.

Tested applications

Western Blot. The usefulness of this product in other applications has not been determined.
Recommended Dilutions:
WB: 1:4000

Background references

(1) Cummings OW et al. (1987) J Biol Chem. 262:2005-2015.
(2) Ruiz-Carrillo A et al. (1987) EMBO J. 6:401-407.
(3) Li LY et al. (2001) Nature. 412:95–99.
(4) Bahi N et al. (2006) J Biol Chem . 281:22943–22952.



1. The western blot signal is reduced in extracts from cultured cells with EndoG gene silencing driven by shRNA interference. The antibody also detects the overexpressed protein in cell cultures. The quality of our antibody has been compared to several commercially available EndoG antibodies. Other commercial antibodies only detect a band at around 35 kDa in Western Blot. EndoG has a molecular weight of 32.6 kDa (immature) and 27,7 KDa (mature, processed at the mitochondria). We detected EndoG overexpression (OvEx) in rat primary cultured cells. We also checked endogenous EndoG expression in cells transduced with control lentivirus (scrambled, scr) and lentiviral vectors inducing specific EndoG silencing by short hairpin RNA interference (RNAi). Other commercial antibodies are reported to detect endogenous EndoG as a band of 35 kDa. However, in our hands these antibodies only detected overexpressed EndoG and an endogenous unspecific band at an apparent molecular weight bigger than EndoG. On the contrary, our antibody correctly detected both repression of endogenous EndoG silencing and EndoG overexpression.