

Rat EndoG protein, His and GST tag

Cat. No. GTX00057-pro

Application	Functional Assay
Species	Rat

Package
10 µg

APPLICATION

Application Note

ENDO G (Endonuclease G) is a mitochondrial enzyme that cleaves DNA at double-stranded (DG)n. (DC)n and at single-stranded (DC)n tracts. This protein also has ribonuclease (RNase) and RNase H activities. It has been reported that EndoG forms complexes with some other proteins, including HSP70 (Heat shock 70 kDa protein). Besides, mouse HSPA1A (Heat shock 70 kDa protein 1A) shares similarities with rat HSPA1A in amino acid sequence with the identity of 98.44%. Thus, a binding ELISA assay was conducted to detect the association of recombinant rat ENDOG with recombinant mouse HSPA1A. Briefly, ENDOG were diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 µl were then transferred to HSPA1A1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ENDOG pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of ENDOG with HSPA1A1 was in a dose dependent manner.

Observed MW 62 kDa.

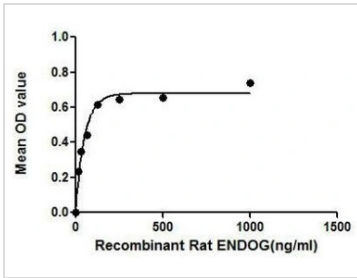
PROPERTIES

Form	Lyophilized powder
Buffer	Reconstitute with 20mM Tris and 150mM NaCl to 0.1-1.0mg/ml. Do not vortex. Lyophilized from 20mM Tris, 150mM NaCl, 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose.
Preservative	ProClin 300
Storage	For short-term storage (1-2 weeks), store at 4°C. For long-term storage, store at -20°C or below. After reconstitution, keep as concentrated solution. Avoid freeze-thaw cycles.
Region/Sequence	Full length protein, N-terminal His and GST-Tag; Met1~Lys294 (NP_001030110.1)
Expression System	E. coli
Purity	> 90%
Endotoxin	< 1 EU/µg
Conjugation	Unconjugated
Note	For laboratory use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

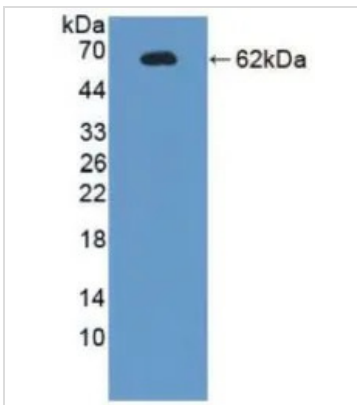


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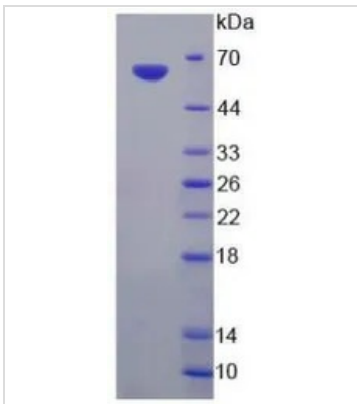
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DATA IMAGES

GTX00057-pro Functional Assay Image

Functional ELISA analysis of GTX00057-pro Rat EndoG protein which can bind immobilized HSP1A1 protein.


GTX00057-pro Image

WB analysis of GTX00057-pro Rat EndoG protein.


GTX00057-pro Image

SDS-PAGE analysis of GTX00057-pro Rat EndoG protein.



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