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## Product Datasheet

### Rat EndoG protein, His and GST tag, Unconjugated GTX00057-PRO

Article Name	Rat EndoG protein, His and GST tag, Unconjugated
Biozol Catalog Number	GTX00057-PRO
Supplier Catalog Number	GTX00057-pro
Alternative Catalog Number	GTX00057-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Rat
Conjugation	Unconjugated
NCBI	<a href="#">362100</a>
UniProt	<a href="#">Q3V5X8</a>
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, ProClin 300.
Expression System	E. coli
Form	Lyophilized powder
Sequence	Full length protein, N-terminal His and GST-Tag, Met1~Lys294 (NP_001030110.1)

#### Application Notes

ENDOG (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 HSP1A1 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  $\mu$ l were then transferred to HSP1A1-coated microtiter wells and incubated for 2h at 37C. 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 37C. Finally, add 50  $\mu$ l stop solution to the wells and read at 450nm immediately. The binding activity of ENDOG with HSP1A1 was in a dose dependent manner.