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## Product Datasheet

### Rat GADD45A protein, His tag, Unconjugated GTX00066-PRO

Article Name	Rat GADD45A protein, His tag, Unconjugated
Biozol Catalog Number	GTX00066-PRO
Supplier Catalog Number	GTX00066-pro
Alternative Catalog Number	GTX00066-PRO-10
Manufacturer	GeneTex
Category	Proteine/Peptide
Application	FA
Species Reactivity	Rat
Conjugation	Unconjugated
NCBI	<a href="#">25112</a>
UniProt	<a href="#">P48317</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	N-terminal His-Tag, Met1~Arg165

#### Application Notes

Growth arrest and DNA-damage-inducible protein GADD45 alpha (GADD45a) is a member of the GADD45 family. It may affect PCNA interaction with some CDK (cell division protein kinase) complexes, stimulates DNA excision repair in vitro and inhibits entry of cells into S phase. In T-cells, functions as a regulator of p38 MAPKs by inhibiting p88 phosphorylation and activity. Besides, Proliferating Cell Nuclear Antigen (PCNA) has been identified as an interactor of GADD45a, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat GADD45a and recombinant rat PCNA. Briefly, GADD45a were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100  $\mu$ l were then transferred to PCNA-coated microtiter wells and incubated for 2h at 37C. Wells were washed with PBST and incubated for 1h with anti-GADD45a 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 GADD45a and PCNA was in a dose dependent manner.