Rat GADD45A protein, His tag

Cat. No. GTX00066-pro

Application	Functional Assay	Package 10 μg
Species	Rat	

APPLICATION

Application Note

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 µl were then transferred to PCNA-coated microtiter wells and incubated for 2h at 37°C. 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 37°C. Finally, add 50 µl stop solution to the wells and read at 450nm immediately. The binding activity of GADD45a and PCNA was in a dose dependent manner.

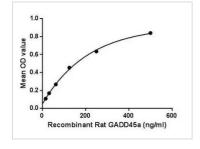
Observed MW 22 kDa.

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	N-terminal His-Tag; Met1~Arg165	
Expression System	E. coli	
Purity	> 95%	
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.	



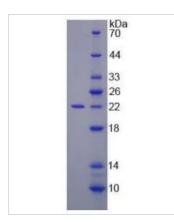
For full product information, images and publications, please visit our <u>website</u>.

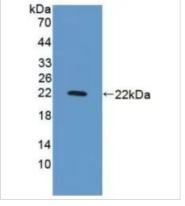
DATA IMAGES



GTX00066-pro Functional Assay Image

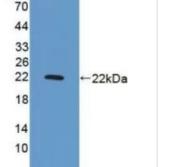
Functional ELISA analysis of GTX00066-pro Rat GADD45A protein which can bind immobilized PCNA protein.





GTX00066-pro Image

SDS-PAGE analysis of GTX00066-pro Rat GADD45A protein.



GTX00066-pro Image

WB analysis of GTX00066-pro Rat GADD45A protein.



For full product information, images and publications, please visit our website.

Date 2024 / 05 / 05 Page 2 of 2