

Active Recombinant Rat Gadd45a protein, His-tagged

Cat. No. Gadd45a-1558R Lot. No. (See product label)

SPECIFICATION

Product Overview Active Recombinant Rat Gadd45a protein(P48317)(1-165 aa), fused with N-terminal His tag, was expressed in E.coli.

Species Rat

Source E.coli

ProteinLength 1-165 aa

Form 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Bio-activity 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 100µL 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

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times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µ stop solution to the wells and read at 450nm immediately. The binding activity of GADD45a and PCNA was shown, and this effect was in a dose dependent manner.

Molecular Mass 22.2kDa

Endotoxin <1.0EU per 1µg (determined by the LAL method).

Purity > 95%

Storage Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.

Reconstitution Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name [Gadd45a growth arrest and DNA-damage-inducible, alpha \[Rattus norvegicus \]](#)

Official Symbol [Gadd45a](#)

Synonyms GADD45A; growth arrest and DNA-damage-inducible, alpha; growth arrest and DNA damage-inducible protein GADD45 alpha; DDIT-1; DNA-damage-inducible transcript 1; DNA damage-inducible transcript 1 protein; growth arrest and DNA-damage-inducible 45 alpha; growth arrest and DNA-damage-inducible protein GADD45 alpha; Ddit1; Gadd45;

Gene ID [25112](#)

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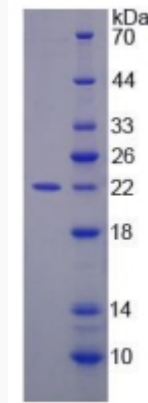
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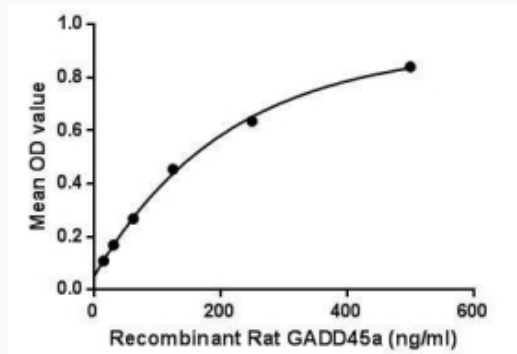
mRNA Refseq [NM_024127](#)

Protein Refseq [NP_077041](#)

SDS-PAGE



Activity



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