

**Rabbit Anti-GADD45B Polyclonal: RC0053**

**Intended Use:** For Research Use Only

**Description:** Belongs to the GADD45 family. Cell cycle progression is subject to arrest at G1 and G2 checkpoints in response to DNA damage, presumably to allow time for DNA repair prior to entry into S and M phase, respectively. The p53 tumor suppressor is required for one such G1 checkpoint and functions to upregulate expression of GADD 45 and p21. GADD 45 binds both CDKs and PCNA, a protein involved in DNA replication and repair. Thus, it has been suggested that GADD 45 may serve as a link between the p53-dependent cell cycle checkpoint and DNA repair. GADD 45-like proteins, GADD 45 $\beta$  and GADD 45 $\gamma$ , have been shown to be induced by environmental stresses. GADD 45 $\beta$  and GADD 45 $\gamma$  are thought to induce p38/JNK activation via MEKK4 activation.

**Specifications**

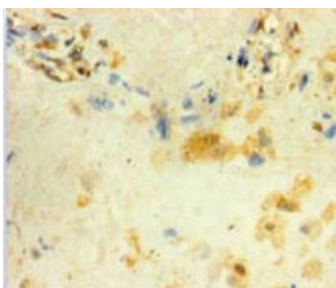
Clone: Polyclonal  
Source: Rabbit  
Isotype: IgG  
Reactivity: Human  
Immunogen: Recombinant human GADD45 beta protein  
Localization: Nucleus  
Formulation: Protein G purified antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, ELISA  
Package:

Description	Catalog No.	Size
GADD45B Polyclonal Concentrated	RC0053	1 ml

**IHC Procedure\***

Positive Control Tissue: Testis, placenta,  
Concentrated Dilution: 10-100  
Pretreatment: Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C  
Incubation Time and Temp: Overnight @ 4°C  
Detection: Refer to the detection system manual

\* Result should be confirmed by an established diagnostic procedure.



FFPE human placenta stained with anti-GADD45B using DAB

**References:**

1. Hepatic Oxidative Stress Activates the Gadd45b Gene. Jung-Hwan Kim, et al. Hepatology, 2014.
2. Gadd45 in the liver: signal transduction and transcriptional mechanisms. Jianmin Tian, Joseph Locker. Adv Exp Med Biol. 793:69-80, 2013.
3. Growth Arrest and DNA-Damage-Inducible, Beta (GADD45b)-Mediated DNA Demethylation in Major Psychosis. David P Gavin, et al. Nature Neuropsychopharmacology. 02 November 2011.