ROCKLAND
Immunochemicals for Research

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Product Specification Sheet

Product: Anti-Mouse GADD45γ [Rabbit]

Code: 100-401-863 **Lot #:** 15038

Size: 100 µl **Physical State:** Liquid (sterile filtered)

Protein Concentration: 85 mg/ml (by refractometry)

Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

Stabilizer: None

Preservative: 0.01% (w/v) Sodium Azide

Background Information: GADD45γ (Growth arrest and DNA-damage-inducible protein also known as cytokine responsive protein CR6) is derived from a member of a group of genes whose transcript levels are increased following stressful growth arrest conditions and treatment with DNA-damaging agents. The protein encoded by this gene responds to environmental stresses by mediating activation of the p38/JNK pathway via MTK1/MEKK4 kinase. The GADD45γ is highly expressed in placenta.

Storage Conditions: Store vial at -20° C prior to opening. Dilute only prior to immediate use. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Expiration date is one (1) year from date of opening.

Application Note(s): This antibody has been tested for use in ELISA, western blotting and immunoprecipitation. Reactivity in other immunoassays is unknown.

Recommended Dilutions: This product was assayed by western blotting after immunoprecipitation of mouse GADD45γ from a lysate containing over expressed protein. A 1:100 to 1:500 dilution shows reactivity with a band at 19.2kDa corresponding to mouse GADD45γ. Use 10 µl for immunoprecipitation.

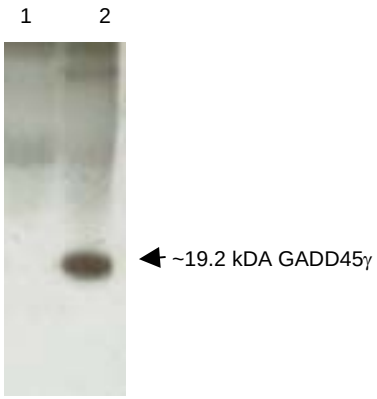

Figure – Immunoprecipitation and western blot using ROCKLAND Immunochemical's Rabbit-anti-GADD45γ antibody. Lane 2 shows the detection of a band corresponding to mouse GADD45γ detected in a lysate over expressing the protein and the absence of staining in a similar lysate isolated from control cells (lane 1). Molecular weight markers (not shown) confirm a MW of ~19.2 kDa. For IP use ~10 µl of antiserum. For WB use a 1:500 dilution of antiserum. Detection occurs using a 1:2,000 dilution of HRP Goat-a-Rabbit IgG (611-103-122) with visualization via ECL. Film exposure approximately 45". Other detection systems will yield similar results.

Purity and Specificity: This antibody was prepared from whole rabbit antiserum by delipidation and defibrination. Reactivity occurs against mouse PI3K p110δ subunit. Cross reactivity is expected against the human protein as the sequence of the immunogen is 100% identical in both human and mouse. Cross reactivity is also expected against rat PI3K p110δ.

Immunogen: This antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids 142-159 of Mouse GADD45 γ . Swiss Prot accession number Q9Z111. This sequence represents the C-terminal end of the protein. Mouse and rat GADD45 γ show 100% sequence homology. A single amino acid change is found in the human sequence (see below).

Protein sequence: Mouse GADD45 γ protein is composed of 159 amino acids (17.2 kDa).

1	mtleevrgqd	tvpestarmq	gagkalhell	lsaqrqgclt	agvyesakvl	nvdpdnvtfc
61	vlaageedeg	dialqihftl	iqafccendi	divrvgdvqr	laaivgagee	agapgdlhci
121	lisnpnedaw	kdpaleklsl	f**ceesrsvnd**	**wvpsitlpe**		

Protein sequence: Human GADD45 γ protein is composed of 159 amino acids (17.1 kDa).

1	mtleevrgqd	tvpestarmq	gagkalhell	lsaqrqgclt	agvyesakvl	nvdpdnvtfc
61	vlaadeedeg	dialqihftl	iqafccendi	divrvgdvqr	laaivgadde	ggapgdlhci
121	lisnpnedtw	kdpaleklsl	f**ceesrsfnd**	**wvpsitlpe**		

General Reference(s):

Kojima,S. et al. (1999) Molecular cloning of rat GADD45gamma, gene induction and its role during neuronal cell death. *FEBS Lett*. **446** (2-3), 313-317.

USDA Certification: All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation.

Note: This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information.