

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human GADD153 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 671708
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human GADD153 Met1-Ala169 Accession # P35638
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

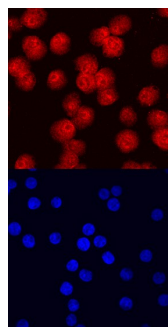
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



GADD153 in Jurkat Human Cell Line. GADD153 was detected in immersion fixed Jurkat human acute T cell leukemia cell line stimulated with PMA and hydrogen peroxide using Mouse Anti-Human GADD153 Monoclonal Antibody (Catalog # MAB7224) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

GADD153, also known as CCAAT-enhancer binding protein zeta (C/EBPz), DDIT, and CHOP, is a ubiquitous 29 kDa basic-leucine zipper transcription factor. GADD153 heterodimerization with other C/EBP factors inhibits their activity and alters their DNA sequence recognition. GADD153 inhibits Wnt signaling by dimerizing with the transcription factors TCF-3 and TCF-4. It is upregulated under conditions of cellular stress including DNA damage, oxidative damage, nutrient depletion, ER stress, and mechanical stress, whereupon it promotes the apoptotic response. The transcriptional activity of GADD153 is enhanced by phosphorylation at Ser 78 and Ser 81. Human GADD153 shares 88% and 90% amino acid sequence identity with mouse and rat GADD153, respectively.