

## Monoclonal anti-human Hsp105 $\alpha$ antibody (clone J1G12)

Mouse IgG<sub>2b</sub>,  $\kappa$

Cat. No. IBAHS0827

**Immunogen:** Recombinant human Hsp105  $\alpha$  (1-858aa) purified from *E. coli*

**NCBI Accession No.:** NP\_006635

**Isotype:** Mouse IgG<sub>2b</sub> heavy chain and  $\kappa$  light chain

**Clone:** Anti-human Hsp105  $\alpha$  mAb, clone J1G12, is derived from hybridization of mouse F0 myeloma cells with spleen cells from BALB/c mice immunized with a recombinant human Hsp105  $\alpha$  protein.

**Description:** Hsp105 is a mammalian member of the Hsp105/110 family, a diverged subgroup of the Hsp70 family. Hsp105 exists as two isoforms, alpha and beta. Hsp105 alpha associates with Hsp70/Hsc70 as complexes *in vivo* and regulates the chaperone activity of Hsp70/Hsc70 negatively *in vitro* and *in vivo*. Hsp105  $\alpha$  is constitutively expressed and also induced by various stress, whereas Hsp105  $\beta$ , lacking 44 amino acids from Hsp105  $\alpha$ , is specifically expressed during mild heat shock. Although Hsp105  $\alpha$  is shown to localize in the cytoplasm of mammalian cells, cellular localization of Hsp105  $\beta$  is not known

**Concentration:** 1 mg/ml

**Form:** Liquid. In Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% Glycerol

**Storage:** Can be stored at +4C. For long term storage, aliquot and store at -20C. Avoid repeated freezing and thawing cycles.

**Usage:** The antibody has been tested by ELISA, Western blot analysis, Flow cytometry and ICC/IF to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

**Application:** ELISA, WB, Flow cytometry, ICC/IF

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**



Manufactured for:

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# Product information

## Western blot analysis

The cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Hsp105  $\alpha$  antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Lane 1.: HeLa cell lysate

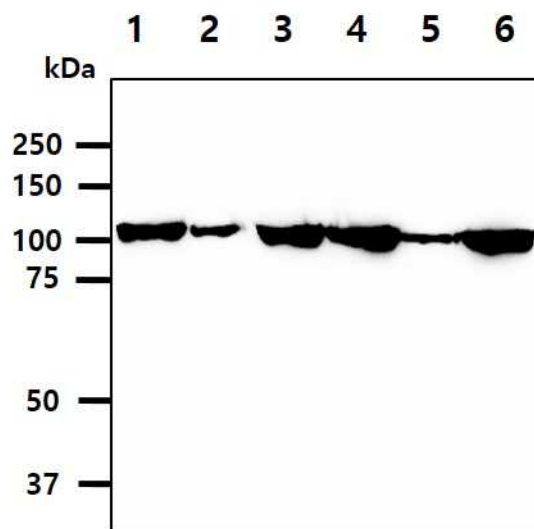
Lane 2.: HepG2 cell lysate

Lane 3.: NIH-3T3 cell lysate

Lane 4.: MCF7 cell lysate

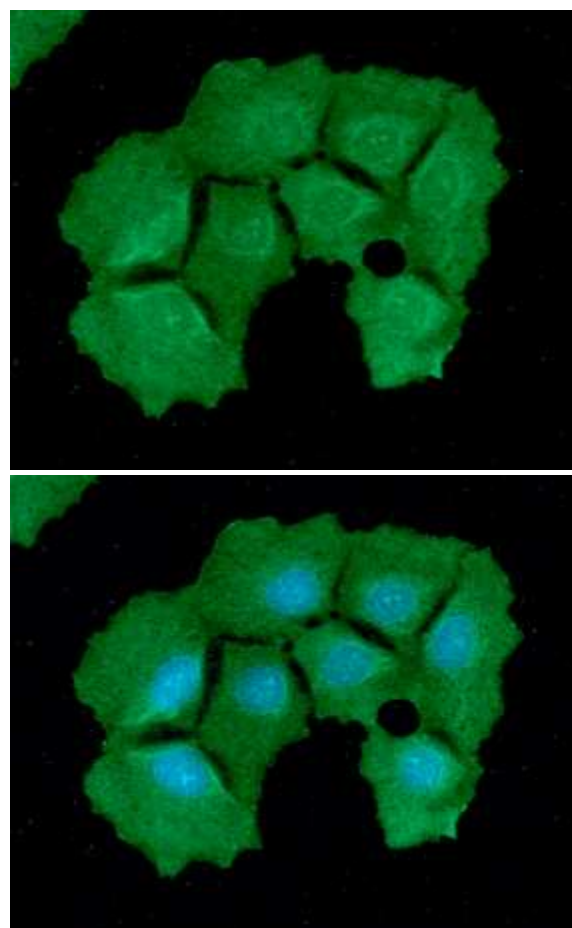
Lane 5.: U-87 MG cell lysate

Lane 6.: A549 cell lysate



## ICC/IF analysis

ICC/IF analysis of Hsp105 $\alpha$  in Hep3B cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human Hsp105 $\alpha$  antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).



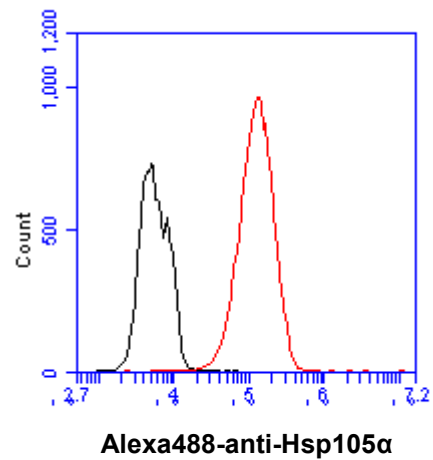
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## Flow cytometry

Flow cytometry analysis of Hsp105 $\alpha$  in Hep3B cell line, staining at 2-5 $\mu$ g for 1x10<sup>6</sup>cells (red line). The secondary antibody used goat anti-mouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).



- General references:** Wang XY., *et al.* (2001) *J Immunol.* **166(1)**: 490-7.  
Yamagishi., *et al.* (2006) *Exp Cell Res.* **312(17)**: 3215-23.  
Saito., *et al.* (2007) *Exp Cell Res.* **313(17)**: 3707-17.

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