

**Catalog #: 63223** 

#### **Aliases**

G3BP1; G3BP Stress Granule Assembly Factor 1; G3BP; HDH-VIII; Ras-GTPase-Activating Protein SH3-Domain-Binding Protein; GTPase Activating Protein (SH3 Domain) Binding Protein 1; Ras GTPase-Activating Protein-Binding Protein 1; GAP SH3 Domain-Binding Protein 1; ATP-Dependent DNA Helicase VIII; DNA Helicase VIII; G3BP-1; RasGAP-Associated Endoribonuclease G3BP; GAP Binding Protein; EC 3.6.4.12; EC 3.6.4.13; HDH VIII; EC 3.6.1

#### **Background**

Gene Name: G3BP1 NCBI Gene Entry: 10146 UniProt Entry: Q13283

### **Application Information**

Molecular Weight: Predicted, 52 kDa, observed, 68 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 24GB4580

Species Reactivity: Human, mouse, rat

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC)

#### **Immunogen**

A synthesized peptide derived from human G3BP

### **Isotype**

Rabbit IgG

### **Storage Buffer**

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

#### **Storage**

Store at -20 °C for one year.

#### **Recommended Dilutions**

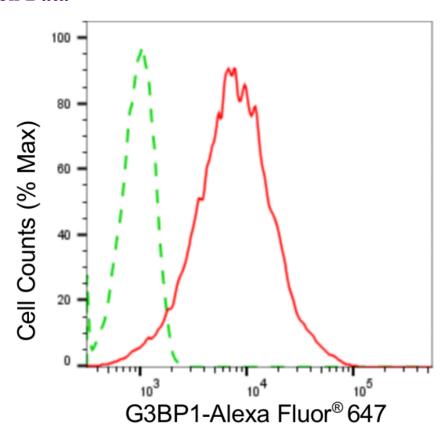
Western Blotting (WB): 1:1,000-1:5,000

Flow Cytometry (FCM): 1:2,000

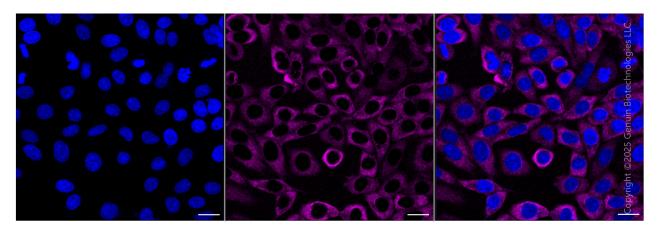
Immunocytochemistry (IC): 1:100-1:1,000

**Note:** This product is for research use only.

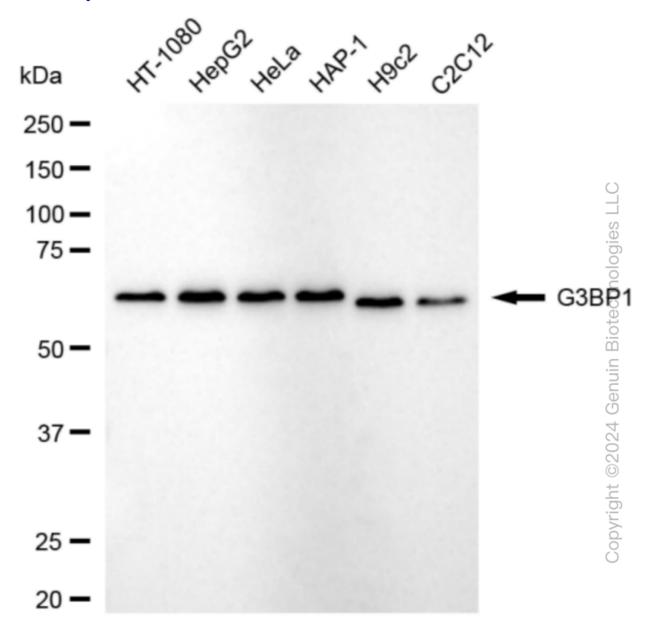
#### **Validation Data**



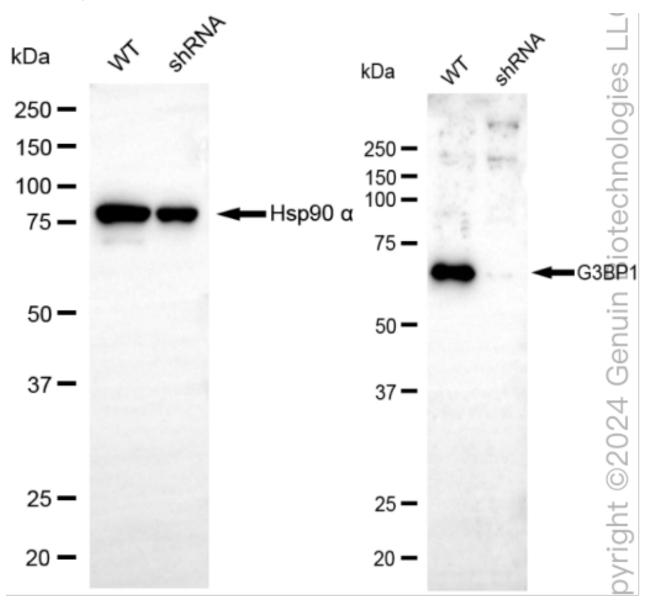
Flow cytometric analysis of G3BP1 expression in HepG2 cells using anti-G3BP1 antibody (Cat#63223, 1:2,000). Green, isotype control; red, G3BP1.



Immunocytochemical staining of HepG2 cells with anti-G3BP1 antibody(Cat#63223, 1:1,000). Nuclei were stained blue with DAPI; G3BP1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20 µm.

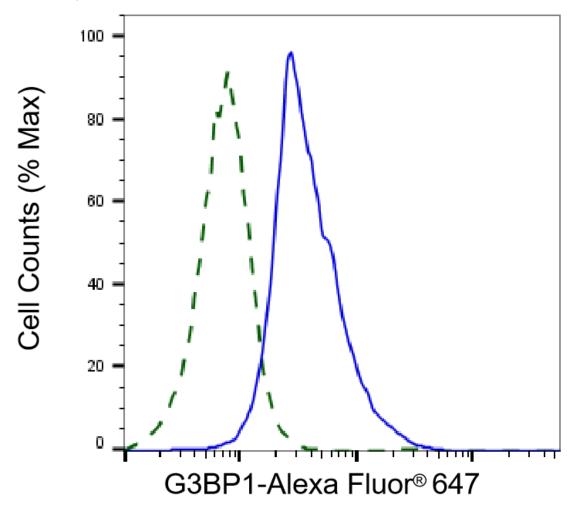


Western blotting analysis using anti-G3BP1 antibody (Cat#63223). Total cell lysates (30 μg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-G3BP1 antibody (Cat#63223, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ<sup>TM</sup> ECL Substrate Kit (Cat#716).

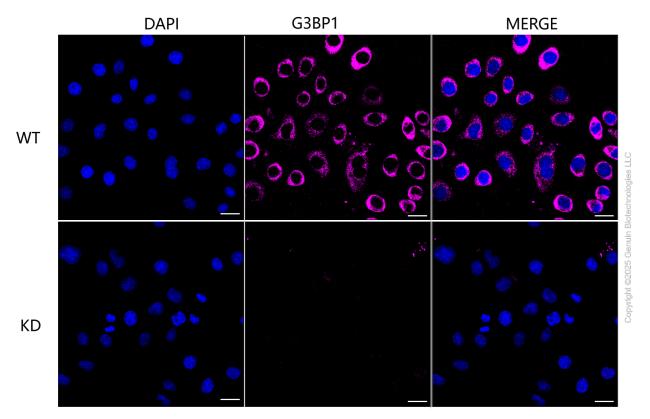


Western blotting analysis using anti-G3BP1 antibody (Cat#63223). G3BP1 expression in wild type (WT) and G3BP1 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-G3BP1 antibody (Cat#63223, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using NaQ<sup>TM</sup> ECL Substrate Kit (Cat#716).





Validation of G3BP1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with anti-G3BP1 antibody (Cat#63223, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HeLa cells using anti-G3BP1 antibody (Cat#63223, 1:1,000), Top panel: wild-type (WT); Bottom panal: G3BP1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; G3BP1 was stained magenta with Alexa Fluor® 647. Scale bar, 20  $\mu$ m. Permeabilization: Triton.