Product Name: KD-Validated G3BP1 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb00767
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 52.2kDa

Antigen Information

Gene Name	G3BP1
Alternative Names	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
Gene ID	10146.0
SwissProt ID	Q13283
Immunogen	A synthesized peptide derived from human G3BP

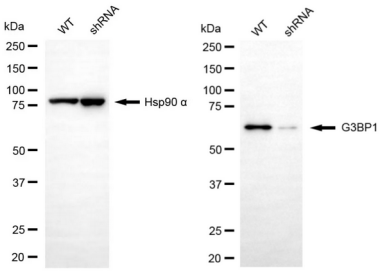
Background

This gene encodes one of the DNA-unwinding enzymes which prefers partially unwound 3'-tailed substrates and can also unwind partial RNA/DNA and RNA/RNA duplexes in an ATP-dependent fashion. This enzyme is a member of the heterogeneous nuclear RNA-binding proteins and is also an element of the Ras signal transduction pathway. It binds specifically to the Ras-GTPase-activating protein by associating with its SH3 domain. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined. [provided by RefSeq, Jul 2008]

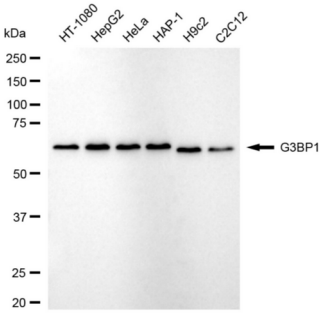
Research Area

Epigenetics and Nuclear Signaling,Neuroscience

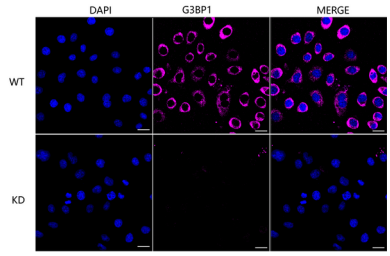
Image Data



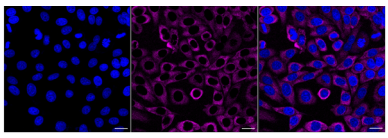
Western blotting analysis using G3BP1 antibody (KVAb00767). G3BP1 expression in wild type (WT) and G3BP1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with G3BP1 antibody (KVAb00767, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



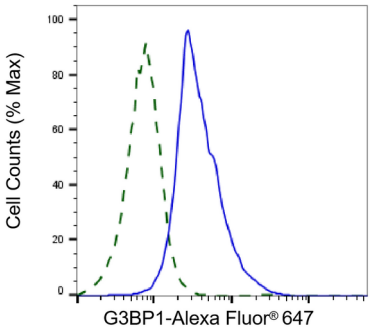
Western blotting analysis using G3BP1 antibody (KVAb00767). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with G3BP1 antibody (KVAb00767, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



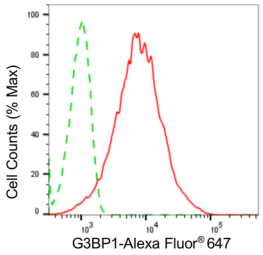
Immunocytochemical staining of HeLa cells using G3BP1 antibody (KVAb00767, 1:1,000), Top panel: wild-type (WT); Bottom panal: G3BP1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; G3BP1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HepG2 cells with G3BP1 antibody(KVAb00767, 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.



Validation of G3BP1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with G3BP1 antibody (KVAb00767, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of G3BP1 expression in HepG2 cells using G3BP1 antibody (KVAb00767, 1:2,000). Green, isotype control; red, G3BP1.