

G3BP1 Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IF-IC	H Mk	Endogenous	68	Rabbit	#Q13283	10146

Product Usage Information**Application**

Western Blotting
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50 - 1:200

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

G3BP1 Antibody recognizes endogenous levels of total G3BP1 protein. This antibody does not cross-react with G3BP2 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val218 of human G3BP1 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Ras GTPase-activating protein-binding protein 1, also known as GAP SH3 domain-binding protein 1 (G3BP1), was identified as a protein that interacts with the SH3 domain of Ras GTPase-activating protein (RasGap) (1). G3BP1 is involved in the regulation of multiple cellular processes, including mRNA decay and inhibition of translation initiation (2). Furthermore, G3BP1 is essential for the assembly of stress granules (SGs) and functions as an SG-nucleating protein (3). Research studies show that arginine demethylation of G3BP1 promotes SG assembly during oxidative stress (4).

Background References

1. Parker, F. et al. (1996) *Mol Cell Biol* 16, 2561-9.
2. Fischer-Kešo, R. et al. (2014) *Mol Cell Biol* 34, 4244-56.
3. Kedersha, N. et al. (2016) *J Cell Biol* 212, 845-60.
4. Tsai, W.C. et al. (2016) *J Biol Chem* 291, 22671-85.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human **Mk:** Monkey

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