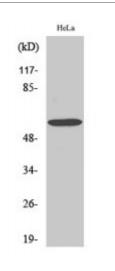


Anti-G3BP1 antibody



Description

Rabbit polyclonal to G3BP1.

Model STJ93173

Host Rabbit

Reactivity Human, Mouse, Simian

Applications ELISA, IHC, WB

Immunogen Synthesized peptide derived from human G3BP1 around the non-

phosphorylation site of S232.

Immunogen Region 170-250 aa

 Gene ID
 10146

 Gene Symbol
 G3BP1

Dilution range WB 1:500-1:2000IHC 1:100-1:300ELISA 1:10000

Specificity G3BP1 Polyclonal Antibody detects endogenous levels of G3BP1 protein.

Tissue Specificity Ubiquitous.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Ras GTPase-activating protein-binding protein 1 G3BP-1 ATP-dependent

DNA helicase VIII hDH VIII GAP SH3 domain-binding protein 1

Molecular Weight 52/60 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide. **Formulation**

1 mg/ml Concentration

Store at -20°C, and avoid repeat freeze-thaw cycles. **Storage Instruction**

Database Links HGNC:30292OMIM:608431

Ras GTPase-activating protein-binding protein 1 G3BP-1 ATP-dependent **Alternative Names**

DNA helicase VIII hDH VIII GAP SH3 domain-binding protein 1

Function May be a regulated effector of stress granule assembly. Phosphorylation-

> dependent sequence-specific endoribonuclease in vitro. Cleaves exclusively between cytosine and adenine and cleaves MYC mRNA preferentially at the 3'-UTR. ATP- and magnesium-dependent helicase. Unwinds preferentially partial DNA and RNA duplexes having a 17 bp annealed portion and either a hanging 3' tail or hanging tails at both 5'- and 3'-ends. Unwinds DNA/DNA, RNA/DNA, and RNA/RNA substrates with comparable efficiency. Acts unidirectionally by moving in the 5' to 3' direction along the bound single-

stranded DNA.

Sequence and Domain Family The NTF2 domain mediates multimerization.

Cellular Localization Cytoplasm. Cytoplasm, cytosol. Cytoplasmic granule. Cell membrane.

> Nucleus. Cytoplasmic in proliferating cells, can be recruited to the plasma membrane in exponentially growing cells. Cytosolic and partially nuclear in resting cells. Recruited to stress granules (SGs) upon either arsenite or high

temperature treatment. Recruitment to SGs is influenced by HRAS.

Post-translational Phosphorylated exclusively on serine residues. Hyperphosphorylated in **Modifications**

quiescent fibroblasts. Hypophosphorylation leads to a decrease in

endoribonuclease activity . RASA1-dependent phosphorylation of Ser-149

induces a conformational change that prevents self-association.

Dephosphorylation after HRAS activation is required for stress granule assembly. Ser-149 phosphorylation induces partial nuclear localization. Arg-435 is dimethylated, probably to asymmetric dimethylarginine.

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