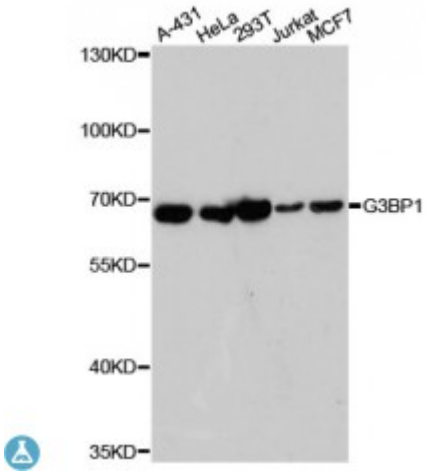
Anti-G3BP1 Antibody



Description	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.

Model	STJ117036
Host	Rabbit
Reactivity	Human
Applications	WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 131-330 of human G3BP1 (NP_938405.1).
Gene ID	10146
Gene Symbol	G3BP1
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Ubiquitous
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Ras GTPase-activating protein-binding protein 1 G3BP-1

Molecular Weight	52.164 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:30292OMIM:608431
Alternative Names	Ras GTPase-activating protein-binding protein 1 G3BP-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,
Cellular Localization	Cytoplasm, cytosol,
Post-translational Modifications	Phosphorylated exclusively on serine residues, Hyperphosphorylated in 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,