ARG51585
anti-G3BP1 phospho (Ser232) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes G3BP1 phospho (Ser232)
Tested Reactivity	Hu
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	G3BP1
Species	Human
Immunogen	Peptide sequence around phosphorylation site of serine 232 (S-S-S(p)-P-A) derived from Human G3BP-1.
Conjugation	Un-conjugated
Alternate Names	G3BP; hDH VIII; G3BP-1; GAP SH3 domain-binding protein 1; EC 3.6.4.13; EC 3.6.4.12; HDH-VIII; ATP-dependent DNA helicase VIII; Ras GTPase-activating protein-binding protein 1

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100 - 1:200
IHC-P	1:50 - 1:100
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

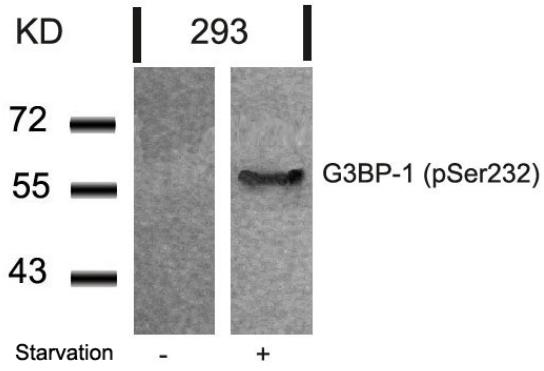
Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Buffer	PBS (without Mg2+ and Ca2+, pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

	and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

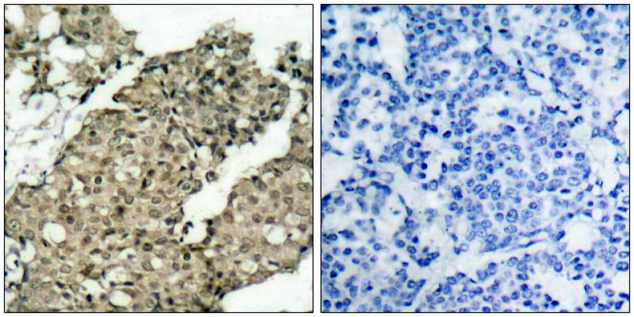
Database links	GeneID: 10146 Human Swiss-port # Q13283 Human
Gene Symbol	G3BP1
Gene Full Name	GTPase activating protein (SH3 domain) binding protein 1
Background	May be a regulated effector of stress granule assembly. Phosphorylation-dependent sequence-specific endoribonuclease in vitro. Cleaves exclusively 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.
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. [UniProt]
Research Area	Gene Regulation antibody
Calculated Mw	52 kDa
PTM	Phosphorylated exclusively on serine residues. Hyperphosphorylated in quiescent fibroblasts. Hypophosphorylation leads to a decrease in endoribonuclease activity (By similarity). 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.

Images



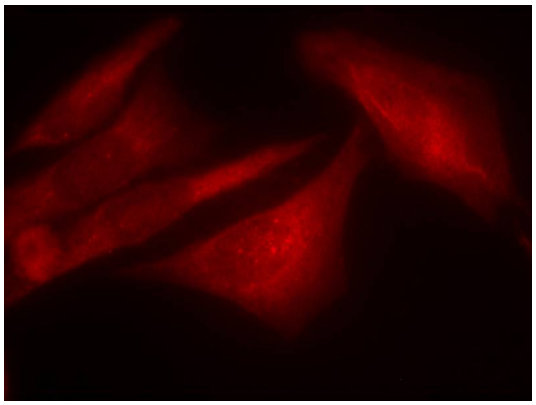
ARG51585 anti-G3BP1 phospho (Ser232) antibody WB image

Western blot: Extracts from 293 cells untreated or treated with starvation stained with ARG51585 anti-G3BP1 phospho (Ser232) antibody.



ARG51585 anti-G3BP1 phospho (Ser232) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51585 anti-G3BP1 phospho (Ser232) antibody (left) or the same antibody preincubated with blocking peptide (right).



ARG51585 anti-G3BP1 phospho (Ser232) antibody ICC/IF image

Immunofluorescence: methanol-fixed HeLa cells stained with ARG51585 anti-G3BP1 phospho (Ser232) antibody.