



G3BP-1 (Phospho Ser149) Rabbit pAb

Catalog No	YP-Ab-17649
Isotype	IgG
Reactivity	Human, Mouse
Applications	IHC, WB
Gene Name	G3BP1 G3BP
Immunogen	Synthesized peptide derived from human G3BP-1 (Phospho Ser149)
Specificity	This antibody detects endogenous levels of G3BP-1 (Phospho Ser149) Rabbit pAb at Human, Mouse
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Rabbit, polyclonal
Purification	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
Dilution	WB 1:500-2000 IHC 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ATP dependent DNA helicase VIII; ATP-dependent DNA helicase VIII; G3BP; G3BP stress granule assembly factor 1; G3BP-1; G3bp1; G3BP1_HUMAN; GAP binding protein; GAP SH3 domain binding protein 1; GAP SH3 domain-binding protein 1; GTPase activating protein (SH3 domain) binding protein 1; hDH VIII; Human DNA helicase VIII; MGC1114; Ras GTPase activating protein binding protein 1; Ras GTPase activating protein SH3 domain binding protein; Ras GTPase-activating protein-binding protein 1; RasGAP associated endoribonuclease G3BP; G3BP1 G3BP; Ras GTPase-activating protein-binding protein 1 (G3BP-1) (EC 3.6.4.12) (EC 3.6.4.13) (ATP-dependent DNA helicase VIII) (hDH VIII) (GAP SH3 domain-binding protein 1)
Observed Band	52 60kD
Calculated Molecular Weight	52 60kD
Cell Pathway	Cytoplasm, cytosol . Perikaryon . Cytoplasm, Stress granule . Nucleus . Cytoplasmic in proliferating cells (PubMed:11604510). Cytosolic and partially nuclear in resting cells (PubMed:11604510). Recruited to stress granules in response to arsenite treatment (PubMed:12642610, PubMed:20180778). The unphosphorylated form is recruited to stress granules (PubMed:12642610). HRAS signaling contributes to this process by regulating G3BP dephosphorylation (PubMed:12642610). .



Tissue Specificity

Ubiquitous.

Function

cofactor:Magnesium. Required for helicase activity.,domain:The NTF2 domain mediates multimerization.,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.,PTM:Arg-435 is dimethylated, probably to asymmetric dimethylarginine.,PTM:Phosphorylated exclusively on serine residues. Hyperphosphorylated in quiescent fibroblasts. Hypophosphorylation leads to a

Background

G3BP stress granule assembly factor 1(G3BP1) Homo sapiens 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],

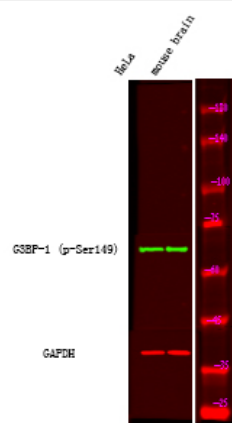
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of HeLa mouse brain tissue using primary antibody at 1:1000 dilution 4°C, overnight. Secondary antibody(catalog#:RS23920) was diluted at 1:10000 25°C, 1.5hours