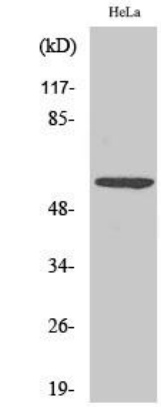
G3BP1 (phospho Ser232) Polyclonal Antibody

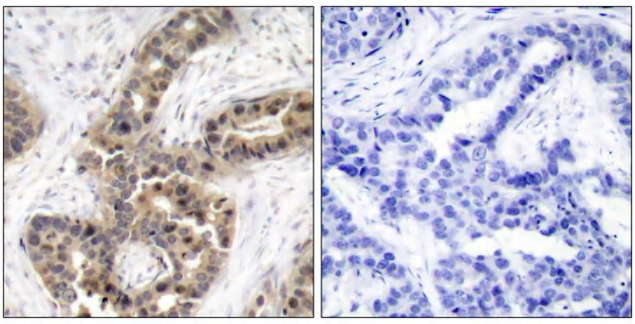
Catalog No	YP-Ab-16108
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	G3BP1
Protein Name	Ras GTPase-activating protein-binding protein 1
Immunogen	The antiserum was produced against synthesized peptide derived from human G3BP-1 around the phosphorylation site of Ser232. AA range:216-248
Specificity	Phospho-G3BP1 (S232) Polyclonal Antibody detects endogenous levels of G3BP1 protein only when phosphorylated at S232.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	G3BP1; G3BP; Ras GTPase-activating protein-binding protein 1; G3BP-1; ATP-dependent DNA helicase VIII; hDH VIII; GAP SH3 domain-binding protein 1
Observed Band	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	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.

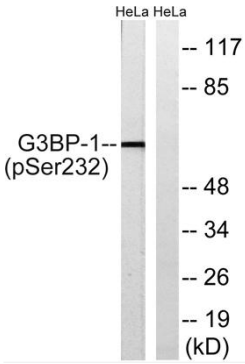
Products Images



Western Blot analysis of various cells using Phospho-G3BP1 (S232) Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast cancer, using G3BP-1 (Phospho-Ser232) Antibody. The picture on the right is blocked with the G3BP-1 (Phospho-Ser232) peptide.



Western blot analysis of extracts from HeLa cells, using G3BP-1 (Phospho-Ser232) Antibody. The lane on the right is treated with the synthesized peptide.