

**G3BP1 (phospho Ser232) Polyclonal Antibody**

<b>Catalog No :</b>	YP0117
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	G3BP1
<b>Gene Name :</b>	G3BP1
<b>Protein Name :</b>	Ras GTPase-activating protein-binding protein 1
<b>Human Gene Id :</b>	10146
<b>Human Swiss Prot No :</b>	Q13283
<b>Mouse Gene Id :</b>	27041
<b>Mouse Swiss Prot No :</b>	P97855
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human G3BP-1 around the phosphorylation site of Ser232. AA range:216-248
<b>Specificity :</b>	Phospho-G3BP1 (S232) Polyclonal Antibody detects endogenous levels of G3BP1 protein only when phosphorylated at S232.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:5000.. IF 1:50-200
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Concentration :</b>	1 mg/ml
<b>Storage Stability :</b>	-15°C to -25°C/1 year(Do not lower than -25°C)

**Observed Band :** 60kD

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**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],

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**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

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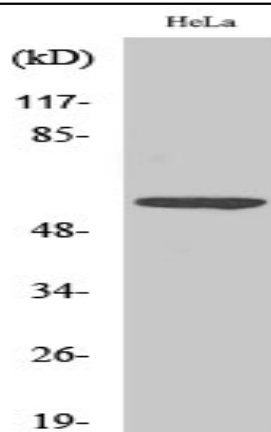
**Subcellular Location :** Cytoplasm, cytosol . Perikaryon . Cytoplasm, Stress granule . Nucleus . Cytoplasmic in proliferating cells (PubMed:11604510). Cytosolic and partially nuclear in resting cells (PubMed:11604510). Recruited to stress granules in response to arsenite treatment (PubMed:12642610, PubMed:20180778). The unphosphorylated form is recruited to stress granules (PubMed:12642610). HRAS signaling contributes to this process by regulating G3BP dephosphorylation (PubMed:12642610). .

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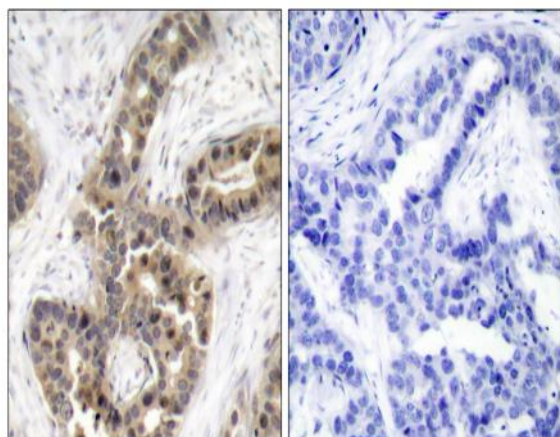
**Expression :** Ubiquitous.

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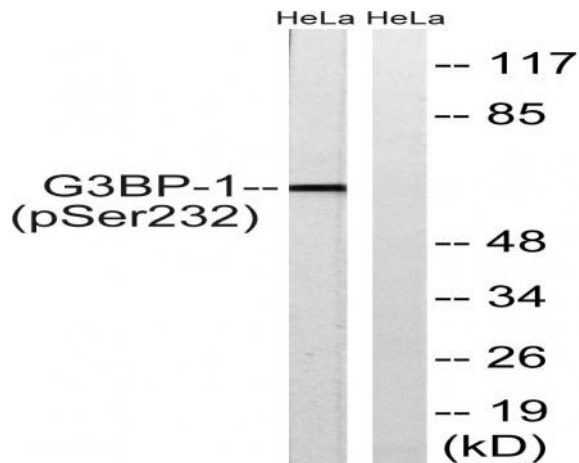
## Products Images



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.