

G3BP1 Polyclonal Antibody

Catalog No :	YT1808
Reactivity :	Human;Mouse;Monkey
Applications :	WB;IHC;IF;ELISA
Target :	G3BP1
Gene Name :	G3BP1
Protein Name :	Ras GTPase-activating protein-binding protein 1
Human Gene Id :	10146
Human Swiss Prot No :	Q13283
Mouse Gene Id :	27041
Mouse Swiss Prot No :	P97855
Immunogen :	The antiserum was produced against synthesized peptide derived from human G3BP-1. AA range:199-248
Specificity :	G3BP1 Polyclonal Antibody detects endogenous levels of G3BP1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 60kD

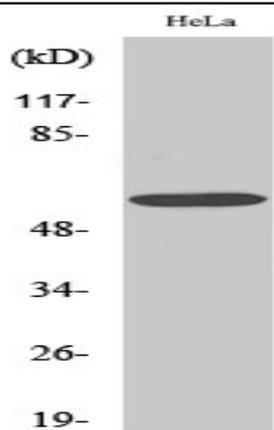
Background : This gene encodes one of the DNA-unwinding enzymes which prefers partially unwound 3'-tailed substrates and can also unwind partial RNA/DNA and RNA/RNA duplexes in an ATP-dependent fashion. This enzyme is a member of the heterogeneous nuclear RNA-binding proteins and is also an element of 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],

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

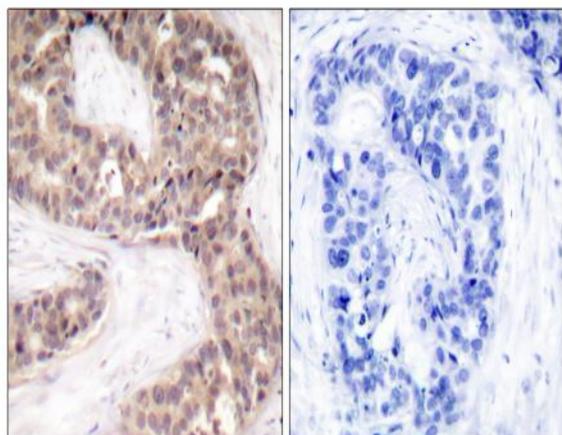
Subcellular Location : Cytoplasm, cytosol . Perikaryon . Cytoplasm, Stress granule . Nucleus . Cytoplasmic in proliferating cells (PubMed:11604510). Cytosolic and partially nuclear in resting cells (PubMed:11604510). Recruited to stress granules in response to arsenite treatment (PubMed:12642610, PubMed:20180778).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

Expression : Ubiquitous.

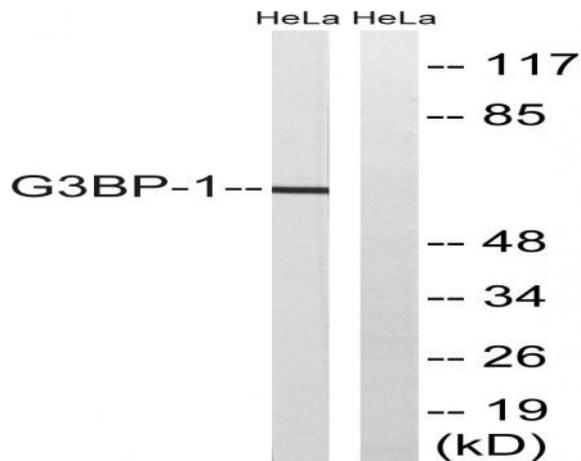
Products Images



Western Blot analysis of various cells using G3BP1 Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma tissue, using G3BP-1 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using G3BP-1 Antibody. The lane on the right is blocked with the synthesized peptide.