

## **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

Q13283

P97855

Human Gene Id: 10146

**Human Swiss Prot** 

No:

Mouse Gene ld: 27041

**Mouse Swiss Prot** 

No:

**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)

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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).

<b>Expression:</b>	Ubiquitous.

**Sort**: 6340

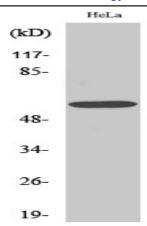
**No4:** 1

Host: Rabbit

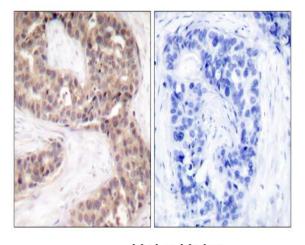
Modifications: Unmodified

## **Products Images**

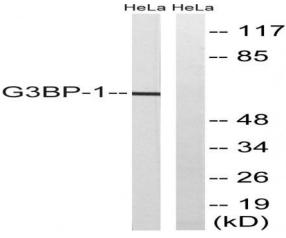
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Western Blot analysis of various cells using G3BP1 Polyclonal Antibody



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.