

G3BP1 (PTR1324) mouse mAb

Catalog No :	YM4539
Reactivity :	Human;Mouse;Rat;
Applications :	WB;IF;ELISA
Target :	G3BP1
Gene Name :	G3BP1 G3BP
Protein Name :	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)
Human Gene Id :	10146
Human Swiss Prot No :	Q13283
Mouse Gene Id :	27041
Mouse Swiss Prot No :	P97855
Immunogen :	Synthesized peptide derived from human protein. AA range: 200-300
Specificity :	This antibody detects endogenous levels of G3BP1 protein.
Formulation :	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source :	Mouse, Monoclonal/IgG2b, kappa
Dilution :	WB 1:500-2000. IF 1:100-500. ELISA 1:1000-5000
Purification :	Protein G
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight : 52kD

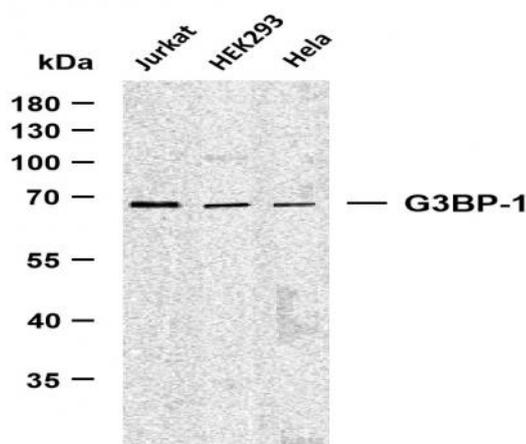
Observed Band : 68kD

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],

Function : ATP- and magnesium-dependent helicase that plays an essential role in innate immunity . Participates in the DNA-triggered cGAS/STING pathway by promoting the DNA binding and activation of CGAS. Enhances also DDX58-induced type I interferon production probably by helping DDX58 at sensing pathogenic RNA . In addition, plays an essential role in stress granule formation . 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 . Phosphorylation-dependent sequence-specific endoribonuclease in vitro . Cleaves exclusively between cytosine and adenine and cleaves MYC mRNA preferentially at the 3'-UTR .

Expression : Ubiquitous.

Products Images



Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-G3BP-1 (PTR1324) antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: Jurkat Lane 2: HEK293 Lane 3: HeLa