

G3BP1 Protein, Human, Recombinant (His)

General Information

Synonyms:	G3BP1; Ras GTPase-activating protein-binding protein 1; GAP SH3 domain-binding protein 1; ATP-dependent DNA helicase VIII (hDH VIII); G3BP-1; G3BP
Protein Construction:	1-466 aa
Species:	Human
Expression Host:	E. coli
Accession:	Q13283
Molecular Weight:	56.2 kDa (predicted)
AA Sequence:	MVMEKPSPLLVGREFVRQYYTLLNQAPDMLHRFYGKNSSYVHGGLDSNGKPADAVYGQKEIHRKVM SQNF TNCHTKIRHVDAHATLNDGVVVQVMGLLSNNQALRRFMQTFVLAPEGSVANKFYVHNDIFRYQDEVFGGF VTEPQEESEEEVEEPEERQQTPEVVPDDSGTFYDQAVVSNDMEEHLEEPVAEPEPDPEPEPEQEPVSEIQEEK PEPVLEETAPEDAQKSSSPADIAQTVQEDLRTFSWASVTSKLNLPSPGAVPVTGIPPHVVKVPASQPRPESK PESQIPPQRPQRDQRVREQRINIPPQGRPIREAGEQGDIEPRRMVRHPDSHQLFIGNLPHEVDKSELKDFE QSYGNVVELRINSGGKLPNFGFVVFDDSEPVQKVLNSRNPIMFRGEVRLNVEEKTRAAREGDRRDNRLRGP GPRGGLGGMRGPPRGGMVQKPGFGVGRGLAPRQ

QC Testing

Biological Activity:	Activity has not been tested. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85% as determined by SDS-PAGE.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	If the delivery form is liquid, the default storage buffer is Tris/PBS-based buffer, 5%-50% glycerol. If the delivery form is lyophilized powder, the buffer before lyophilization is Tris/PBS-based buffer, 6% Trehalose, pH 8.0.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in sterile deionized water. The product concentration should not be less than 100 μg/mL. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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