

Product datasheet

Recombinant Human G3BP protein ab103304

[1 Image](#)

Description

Product name	Recombinant Human G3BP protein
Purity	> 85 % SDS-PAGE. ab103304 was purified using conventional chromatography techniques.
Expression system	Escherichia coli
Accession	<u>Q13283</u>
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MVMEKPSPLLVGREFVRQYYTLLNQAPDMLHRFYGKNSS YVHGGLDSNGK PADAVYGQKEIHRKVMSQNFTNCHTKIRHVDAHATLNDGV VVQVMGLLSN NNQALRRFMQTFVLAPEGSVANKFYVHNDIFRYQDEVFG GFVTEPQEESI EEVEEPEERQQTPEVVPDDSGTFYDQAVVSNDMEEHLE EPVAEPEPDPEP EPEQEPVSEIQEEKPEPVLEETAPEDAQKSSSPAPADIA QTVQEDLRTFS WASVTSKNLPPSGAVPVTGIPPHVVKVPASQPRPESKPE SQIPPQRPQRD QRVREQRINIPPQRGPRPIREAGEQGDIERRMVRHPDSH QLFIGNLPHE VDKSELKDFQSYGNVVELRINSGGKLPNFGFVVFDDSE PVQKVLSNRPI MFRGEVRLNVEEKKTRAAREGDRRDNRLRGPGGPRGGL GGMRGPPRGGM VQKPGFGVGRGLAPRQVEHHHHHH
Predicted molecular weight	53 kDa including tags
Amino acids	1 to 466
Tags	His tag C-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab103304** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE Mass Spectrometry
Mass spectrometry	MALDI-TOF
Form	Liquid

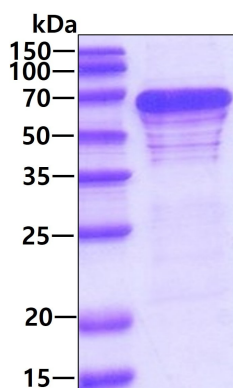
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 8.00 Constituents: 0.0308% DTT, 0.316% Tris HCl, 10% Glycerol (glycerin, glycerine), 0.58% Sodium chloride
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General Info

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.
Tissue specificity	Ubiquitous.
Sequence similarities	Contains 1 NTF2 domain. Contains 1 RRM (RNA recognition motif) domain.
Domain	The NTF2 domain mediates multimerization.
Post-translational modifications	Phosphorylated exclusively on serine residues. Hyperphosphorylated in quiescent fibroblasts. Hypophosphorylation leads to a decrease in endoribonuclease activity (By similarity). RASA1-dependent phosphorylation of Ser-149 induces a conformational change that prevents self-association. Dephosphorylation after HRAS activation is required for stress granule assembly. Ser-149 phosphorylation induces partial nuclear localization. Arg-435 is dimethylated, probably to asymmetric dimethylarginine.
Cellular localization	Cytoplasm. Cytoplasm > cytosol. Cell membrane. Nucleus. Cytoplasmic in proliferating cells, can be recruited to the plasma membrane in exponentially growing cells (By similarity). Cytosolic and partially nuclear in resting cells. Recruited to stress granules (SGs) upon either arsenite or high temperature treatment. Recruitment to SGs is influenced by HRAS.

Images



SDS-PAGE - Recombinant Human G3BP protein
(ab103304)

SDS-PAGE analysis of Recombinant Human G3BP protein (ab103304), under reducing conditions. Proteins visualized by coomassie blue stain.

Lane 1: Molecular Weight Standards

Lane 2: 3 µg Recombinant Human G3BP protein

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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