

## GRB2 Protein

Full-length recombinant protein expressed in E. coli cells

**Catalog # G45-30G**

Lot # Q115-2

### Product Description

Recombinant full-length human GRB2 was expressed in E. coli cells using an N-terminal GST tag. The gene accession number is [NM\\_002086](#).

### Gene Aliases

ASH, Grb3-3, MST084, MSTP084, EGFRBP-GRB2

### Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.

### Storage and Stability

Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

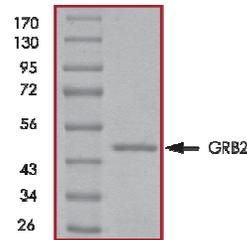
### Scientific Background

GRB2 is an adaptor protein that is the homolog of the Sem5 gene of C. elegans and Drk gene of Drosophila. GRB2 protein contains one SH2 domain and two SH3 domains and plays a role in growth factor-mediated signal transduction. GRB2 forms a complex with activated EGFR and the RAS-specific guanine nucleotide exchange factor SOS1 thereby mediating the growth factor-induced activation of RAS (1). GRB2 has been implicated in growth factor regulation of the cytoskeleton and DNA synthesis. DAB2 also binds to GRB2 and competes with SOS for GRB2 binding. GRB2 interacts with the hepatitis C virus nonstructural 5A (NS5A) protein and inhibits the activation of ERK1 and ERK2 by EGF (2).

### References

1. Lowenstein, E. J. et al: The SH2 and SH3 domain-containing protein GRB2 links receptor tyrosine kinases to ras signaling. Cell 70: 431-442, 1992.
2. Tan, S.-L. et al: NS5A, a nonstructural protein of hepatitis C virus, binds growth factor receptor-bound protein 2 adaptor protein in a Src homology 3 domain/ligand-dependent manner and perturbs mitogenic signaling. Proc. Nat. Acad. Sci. 96: 5533-5538, 1999.

### Purity



The purity of GRB2 was determined to be **>95%** by densitometry. Approx. MW **49kDa**.

## GRB2 Protein

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Catalog Number	G45-30G
Specific Lot Number	Q115-2
Purity	>95%
Concentration	0.2 µg/µl
Stability	1 yr At -70°C from date of shipment
Storage & Shipping	Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.

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