

# Summary

Production Name	GRB2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

#### Immunogen

Gene Name	GRB2
Alternative Names	GRB2; ASH; Growth factor receptor-bound protein 2; Adapter protein GRB2; Protein
	Ash; SH2/SH3 adapter GRB2
Gene ID	2885.0
SwissProt ID	P62993.The antiserum was produced against synthesized peptide derived from human
	GRB2. AA range:141-190

# Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:40000. Not yet tested in other applications.
Molecular Weight	32kD



#### Background

The protein encoded by this gene binds the epidermal growth factor receptor and contains one SH2 domain and two SH3 domains. Its two SH3 domains direct complex formation with proline-rich regions of other proteins, and its SH2 domain binds tyrosine phosphorylated sequences. This gene is similar to the Sem5 gene of C.elegans, which is involved in the signal transduction pathway. Two alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008], alternative products: Additional isoforms seem to exist, domain: The SH3 domains mediate interaction with RALGPS1 and SHB., function: Adapter protein that provides a critical link between cell surface growth factor receptors and the Ras signaling pathway., function: Isoform GRB3-3 does not bind to phosphorylated epidermal growth factor receptor (EGFR) but inhibits EGF-induced transactivation of a RAS-responsive element. Isoform GRB3-3 acts as a dominant negative protein over GRB2 and by suppressing proliferative signals, may trigger active programmed cell death.,similarity:Belongs to the GRB2/sem-5/DRK family.,similarity:Contains 1 SH2 domain.,similarity:Contains 2 SH3 domains.,subunit:Associates with activated Tyr-phosphorylated EGF receptors and PDGF receptors via its SH2 domain. Also associates to other cellular Tyr-phosphorylated proteins such as SIT1, IRS1, IRS4, SHC and LNK; probably via the concerted action of both its SH2 and SH3 domains. It also seems to interact with RAS in the signaling pathway leading to DNA synthesis. Binds to and translocates the guanine nucleotide exchange factors SOS. Interacts with phosphorylated TOM1L1 and MET. Interacts with the phosphorylated C-terminus of SH2B2. Interacts with phosphorylated SIT1, LAX1, LAT, LAT2 and LIME1 upon TCR and/or BCR activation. Interacts with NISCH, PTPNS1, REPS2 and the syntrophin SNTA1. Interacts with REPS1 and PIK3C2B via its SH3 domains (By similarity). Interacts with HCV NS5A via its SH3 domains. Interacts with CBL and CBLB. Interacts with JUB and CLNK (By similarity). Interacts with SHB, INPP5D/SHIP1, SKAP1 and SKAP2. Forms a complex with MUC1 and SOS1, through interaction of the SH3 domains with SOS1 and the SH2 domain with phosphorylated MUC1. Interacts with PRNP (By similarity). Interacts with RALGPS1 and with HCST. Interacts (via SH3 domain) with HEV ORF3 protein. Interacts with GAPT.,

#### **Research Area**

MAPK\_ERK\_Growth;MAPK\_G\_Protein;ErbB\_HER;Chemokine;Dorso-ventral axis formation;Focal adhesion;Gap junction;Jak\_STAT;Natural killer cell mediated cytotoxicity;T\_Cell\_Receptor;B\_Cell\_Antigen;Fc epsilon RI;Neurotrophin;Insulin\_Receptor;GnRH;Pathways in cancer;Colorectal cancer;Renal cell carcinoma;Endometrial cancer;Glioma;Prostate cancer;Chronic myeloid leukemia;Acute myeloid leukemia;Non-small cell lung cancer;

### Image Data

## Product Name: GRB2 Rabbit Polyclonal Antibody Catalog #: APRab11752





Western blot analysis of lysates from Jurkat cells, using GRB2 Antibody. The lane on the right is blocked with the synthesized



Western blot analysis of the lysates from HeLa cells using GRB2 antibody.





Note

For research use only.