

DESCRIPTION

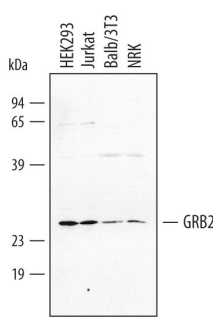
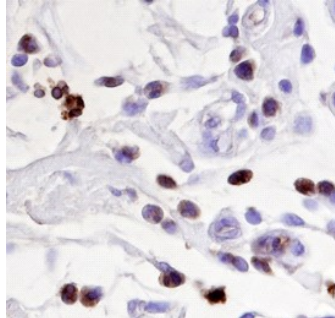
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat GRB2.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human GRB2 Met1-Val217 Accession # P62993
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human/Mouse/Rat GRB2 by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line, Jurkat human acute T cell leukemia cell line, Balb/3T3 mouse embryonic fibroblast cell line, and NRK rat normal kidney cell line. PVDF membrane was probed with 1 µg/mL of Human/Mouse/Rat GRB2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3846) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for GRB2 at approximately 27 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>GRB2 in Human Breast Cancer Tissue. GRB2 was detected in immersion fixed paraffin-embedded sections of human breast cancer tissue using 10 µg/mL Human GRB2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3846) overnight at 4 °C. Before incubation with the primary antibody tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

GRB-2 (growth factor receptor-bound protein 2), an adaptor protein involved in signal transduction, contains a central SH2 domain flanked by two SH3 domains. The SH2 domain binds to phosphotyrosine residues in RTKs such as PDGF and EGF, non-RTKs such as Bcr/Abl and FAK, and docking proteins such as FRS-2 and Gab1. The SH3 domains associate with proline rich motifs on the guanine nucleotide releasing factor, Sos, stimulating GTP binding to Ras, which in turn activates MAPK and other signaling pathways. GRB-2 also participates in the endocytosis of EGFR through its recruitment of Cbl. Tyrosine phosphorylation of GRB-2 SH3 domains reduces binding to Sos and negatively regulates downstream signaling pathways including Ras, JNK and MAPK.