**BACKGROUND**

The superfamily of GTP binding proteins, of which Ras proteins are prototypes, has been implicated in a broad range of biological activities. A family of guanine nucleotide releasing factors (GRFs) activate Ras in mammalian cells and growth factor receptor-bound protein 2 (GRB2), an adaptor protein (also referred to as Sem 5) that appears to mediate the interaction of GRFs with activated receptor molecules. GRB2 forms a complex with activated EGFR (epidermal growth factor receptor) and the Ras-specific guanine nucleotide exchange factor SOS1, and, together, they regulate the growth factor-induced activation of Ras. GRB2 exhibits both structural and functional homology to the C. elegans protein sem-5. GRB2 is necessary during embryogenesis for the differentiation of endodermal cells and formation of the epiblast.

**CHROMOSOMAL LOCATION**

Genetic locus: GRB2 (human) mapping to 17q25.1; Grb2 (mouse) mapping to 11 E2.

**SOURCE**

GRB2 (C-7) is a mouse monoclonal antibody raised against amino acids 54-164 mapping to a central domain of GRB2 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG, kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GRB2 (C-7) is available conjugated to agarose (sc-8034 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8034 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-8034 PE), fluorescein (sc-8034 FITC), Alexa Fluor® 488 (sc-8034 AF488), Alexa Fluor® 546 (sc-8034 AF546), Alexa Fluor® 594 (sc-8034 AF594) or Alexa Fluor® 647 (sc-8034 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-8034 AF680) or Alexa Fluor® 790 (sc-8034 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**APPLICATIONS**

GRB2 (C-7) is recommended for detection of GRB2 p25 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GRB2 siRNA (h): sc-29334, GRB2 siRNA (m): sc-29335, GRB2 shRNA Plasmid (h): sc-29335-SH, GRB2 shRNA Plasmid (m): sc-29335-SH, GRB2 siRNA (h) Lentiviral Particles: sc-29334-V and GRB2 shRNA (m) Lentiviral Particles: sc-29335-V.

Molecular Weight of GRB2: 25-31 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, HL-60 whole cell lysate: sc-2209 or MOLT-4 cell lysate: sc-2233.

**STORAGE**

Store at 4°C, **”DO NOT FREEZE”**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.