**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 C-23) 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 Sos 1, 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-23) is available as either rabbit (sc-255) or goat (sc-255-G) affinity purified polyclonal antibody raised against a peptide mapping at the C-terminus of GRB2 of human origin.

**PRODUCT**

Each vial contains either 100 µg (sc-255) or 200 µg (sc-255-G) IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-255 P, (100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA).

Available as phycoerythrin conjugate for flow cytometry, sc-255 PE, 100 tests. In 0.5 ml PBS containing <0.1% sodium azide and 0.2% BSA.

Available as agarose conjugate for immunoprecipitation, sc-255 AC, PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-255 P, (100µg peptide (1ml of cell lysate), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunoprecipitation [1-2µg 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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GRB2 (C-23) 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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GRB2 (C-23) is also recommended for detection of GRB2 p25 in additional species, including equine, canine, bovine, porcine and avian.

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

Molecular Weight of GRB2: 25-31 kDa.

Positive Controls: COLO 320DM cell lysate: sc-2226, NIH/3T3 whole cell lysate: sc-2221 or A-431 whole cell lysate: sc-2201.

**APPLICATIONS**

GRB2 (C-23) 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), flow cytometry (1 µg per 1 x 10^6 cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

**STORAGE**

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

**DATA**

![Western blot analysis of GRB2 expression in COLO 320DM (A), NIH/3T3 (B) and A-431 (C) whole cell lysates.](image)

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

![Western blot analysis of GRB2 expression in COLO 320DM (A), NIH/3T3 (B) and A-431 (C) whole cell lysates.](image)