SANTA CRUZ BIOTECHNOLOGY, INC.

GRB2 (1-68): sc-4034

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

REFERENCES

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CHROMOSOMAL LOCATION

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

SOURCE

GRB2 (1-68) is expressed in *E. coli* as a 36 kDa tagged fusion protein corresponding to amino acids 1-68 of GRB2 of mouse origin containing the amino terminal SH3 domain.

PRODUCT

GRB2 (1-68) is purified from bacterial lysates (>98%) by glutathione agarose chromatography and supplied as 50 µg purified protein in PBS containing 5 mM DTT and 50% glycerol.

Also available in agarose conjugate format; 100 µg protein conjugated to 0.1 ml agarose in PBS containing 0.1% azide, 0.1% BSA and 10% glycerol (50% slurry of agarose beads by volume): GRB2 (1-68) AC: sc-4034 AC.

APPLICATIONS

GRB2 (1-68) in its soluble, non-conjugated form (sc-4034) is recommended for purification of target proteins containing appropriate proline-rich sequences when used in combination with glutathione agarose (sc-2009).

Alternatively, the agarose conjugated form of this product (sc-4034 AC) can be used directly for target protein binding.

Molecular Weight of GRB2: 25-31 kDa.

SELECT PRODUCT CITATIONS

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STORAGE

Store GRB2 (1-68): sc-4034 at -20° C and GRB2 (1-68) AC: sc-4034 AC at 4° C; stable for one year from the date of shipment.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.