



Ras-GRF1 (791-1262): sc-4109 WB

BACKGROUND

A critical step in signal transduction responses to stimulation of cell surface receptors by their ligands involves the accumulation of Ras proteins in their active GTP-bound state. To reach their active GTP-bound state, Ras proteins must first release bound GDP, a rate-limiting step mediated by a guanine nucleotide releasing factor (GRF). The mammalian Ras p21 GRF protein has been designated Ras-GRF p140. Ras-GRF accelerates release of GDP from H- and N-Ras p21 protein *in vitro*, but not from the related Ral A or Cdc42Hs GTP-binding proteins. Of interest, a region mapping within the amino terminal domain of Ras-GRF is similar to both the human breakpoint cluster protein, Bcr, and the Dbl proto-oncogene product, a guanine nucleotide-releasing factor for CDC42Hs. Ras-GRF2 p135 has also been identified. Ras-GRF2 p135 is highly homologous to Ras-GRF1 p140 except in the region between the REM and CDC25 domains and appears to function similarly to Ras-GRF1 p140.

REFERENCES

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SOURCE

Ras-GRF (791-1262) is expressed in *E. coli* as an 84 kDa tagged fusion protein corresponding to amino acids 791-1262 of Ras-GRF1 protein of mouse origin.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

PRODUCT

Ras-GRF1 (791-1262) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

Ras-GRF1 (791-1262) is suitable as a Western blotting control for sc-963.

RESEARCH USE

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