SANTA CRUZ BIOTECHNOLOGY, INC.

Ras GAP (277-346): sc-4056

BACKGROUND

The mammalian c-H-, c-K- and N-Ras proto-oncogenes encode ubiquitously expressed 21 kDa proteins. p21Ras can exist in either a physiologically quiescent GDP-binding state or a GTP-binding signal-emitting state. Oncogenic p21Ras proteins are trapped in the excited signal-emitting state because the mechanism normally employed to delimit their excitation period, hydrolysis of their bound GTP to GDP, is impaired as a result of specific mutations. Interaction of p21Ras with GTPase activating protein (GAP) can increase hydrolysis of p21Ras-bound GTP by as much as 1000-fold. The product of the neurofibromatosis type 1 gene (NF1) has also been shown to exhibit p21Ras GAP activity. Proteins that stimulate the GTPase activity of three other low molecular weight GTPases, including Rho, Rab 3A and Rap 1, have also been described.

REFERENCES

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SOURCE

Ras GAP (277-346) is expressed in *E. coli* as a 38 kDa tagged fusion protein corresponding to amino acids 277-346 of Ras GAP of human origin.

RESEARCH USE

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

PRODUCT

Ras GAP (277-346) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 50 µg purified protein in PBS containing 5 mM DTT and 50% glycerol.

Also available as agarose conjugate: Ras GAP (277-346) AC: sc-4056 AC; supplied as 100 µg protein conjugated to 0.1 ml agarose in PBS containing 0.1% azide, 0.1% BSA and 10% glycerol.

APPLICATIONS

Ras GAP (277-346) is recommended for the enrichment of Ras GAP associated proteins when used in combination with Glutathione-Agarose (sc-2009).

Agarose conjugate form, sc-4056 AC, is recommended for direct precipitation of target proteins.

STORAGE

Store Ras GAP (277-346): sc-4056 at -20° C and store Ras GAP (277-346) AC: sc-4056 AC at 4° C; stable for one year from the date of shipment.