



N-Ras (1-189): sc-4350 WB

BACKGROUND

The mammalian c-H-, c-K- and N-Ras proto-oncogenes encode 21 kDa proteins that are ubiquitously expressed in vertebrate cells. c-H- and c-K-Ras are cellular homologs of the v-H- and v-K-Ras sequences originally isolated from the Harvey and Kirsten strains of rat sarcoma virus. p21Ras-encoded proteins bind GDP and GTP with high affinity and possess a low level intrinsic GTPase activity that can be stimulated over 100-fold by interaction with cytosolic GTPase activating protein (GAP), a potential effector for Ras p21 function. Point mutations at amino acids 12, 13, 59 and 61 within domains responsible for GTP binding and hydrolysis activate Ras proteins to their oncogenic form and block the ability of their GTPase activities to be stimulated by GAP. The Raf protein kinase has been identified as a downstream effector of Ras, which is regulated by 14-3-3 proteins and in turn phosphorylates and activates MAP kinases.

REFERENCES

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SOURCE

N-Ras (1-189) is expressed in *E. coli* as a 48 kDa tagged fusion protein corresponding to amino acids 1-189 representing full length N-Ras p21 of human origin.

PRODUCT

N-Ras (1-189) is purified from bacterial lysates (>98%) by column chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

N-Ras (1-189) is suitable as a Western blotting control for sc-31, sc-32, sc-519 and sc-14022.

STORAGE

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

RESEARCH USE

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