BACKGROUND

H-, K- and N-Ras represent the prototype members of a family of small G proteins that are frequently activated to an oncogenic state in a wide variety of human tumors. Activation is due to point mutations at either position 12 or 61 within their coding sequence. Such mutations cause these proteins to be constitutively converted to their active GTP-bound, rather than the inactive GDP-bound, state. The related human R-Ras gene was initially cloned by low stringency hybridization methods. Position 38 and 87 (analogous to position 12 and 61 in H-Ras) mutants of R-Ras have been shown to be capable of activating oncogenic function. An additional member of the Ras oncogene family, designated TC 21 (or R-Ras-2) is most closely related to R-Ras. While wild type TC 21 does not exhibit transforming potential in vitro, mutant forms of TC 21 that possess amino acid substitutions analogous to those that activate Ras oncogenic potential, exhibit potent transforming activities comparable to the activity characteristic of the known oncogenic Ras proteins.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: RRAS2 (human) mapping to 11p15.2; Rras2 (mouse) mapping to 7 F1.

SOURCE

TC 21 (H-45) is a rabbit polyclonal antibody raised against amino acids 137-181 mapping near the C-terminus of TC 21 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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