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Product Information

MONOCLONAL ANTI-c-H-Ras

Clone F235-1.7.1

Purified Mouse Immunoglobulin

Product Number **R 3275**

Product Description

Monoclonal Anti-c-H-ras (mouse IgG1 κ isotype) is derived from the F235-1.7.1 hybridoma produced by the fusion of P3X63 Ag8.653 myeloma cells and splenocytes from a BALB/c mouse immunized with recombinant p21 protein. The antibody is using either Protein A or Protein G.

Monoclonal Anti-c-H-ras recognizes an epitope within residues 54-188 of c-H-ras. It detects c-H-ras and, weakly, v-H-ras by immunoblotting and immunoprecipitation in mouse, rat, and human tissues. The antibody may also be used with frozen or paraffin-embedded tissue sections.

Ras proteins are signal-transducing, guanine nucleotide-binding proteins that appear to function as a branchpoint in signal transduction. Ras coordinates the activity of multiple signalling pathways, regulating diverse cellular functions including cell growth, differentiation and apoptosis.

The human ras gene family consists of three identified members which encode proteins of 21 kDa.¹ Human c-H-ras and c-K-ras are the cellular homologs of v-H- and v-K-ras originally isolated from Harvey and Kirsten strains of rat sarcoma viruses.¹⁻³ The third family member is designated c-N-ras.^{4,5}

Normal cellular ras genes are referred to as proto-oncogenes and have the potential for activation to oncogenes by mutations occurring in codons 12, 13 and 61. Such mutated, activated and transforming ras genes have been identified and isolated from human tumors and cultured tumor cells.⁶ Although the expression patterns of ras proto-oncogene proteins in normal human tissues are known,⁷ similar information for activated ras oncogene encoded p21s and their relevance to human disease diagnosis and prognosis remains to be determined.^{8,9}

Reagents

Monoclonal Anti-c-H-ras is supplied as 0.1-0.2 mg/ml of purified antibody in 0.05 M sodium phosphate buffer, pH 7.5 containing 0.1% sodium azide and 0.2% gelatin.

Precautions and Disclaimer

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazardous and safe handling practices.

Storage/Stability

Store at 2-8 °C. Do not freeze. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

The recommended working concentration is 10 μ g/ml for immunoblotting using ras 1 cells and 5 μ g/reaction for immunoprecipitation using lysate from ³⁵S-Met labeled ras 1 cells.

The recommended working concentration is 5 μ g/ml for immunohistochemistry using either frozen or paraffin-embedded normal skin tissue sections. Paraffin sections will require treatment with saponin (0.05% in water, 30 min.) or pepsin (0.1% in 0.1N HCl, 10-20 min.) at room temperature.

In order to obtain best results and assay sensitivity in different techniques and preparations we recommend determining optimum working dilutions by titration assay.

References

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