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ProductInformation

MONOCLONAL ANTI-v-H-Ras
Clone Y13-238
Purified Rat Immunoglobulin

Product Number **R3650**

Product Description

Monoclonal Anti-v-H-Ras (rat IgG2aκ isotype) is derived from the hybridoma produced by the fusion of Y3 Ag1.2.3 rat myeloma cells with splenocytes from an immunized rat. A recombinant p21 protein was used as immunogen. The antibody is purified using Protein G.

Monoclonal Anti-v-H-ras reacts with v-H-ras (within amino acids 120-138) and rodent c-H-*ras* p21's but not v-K-ras or rodent c-K-*ras* p21's. This antibody also recognizes human c-H-ras and c-K-*ras* p21's but not human c-N-ras. Monoclonal Anti-v-H-ras may be used for both immunoprecipitation and immunofluorescence. It is not recommended for blotting, and it does not neutralize p21 ras GTP binding and hydrolysis *in vivo* or *in vitro.*

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-v-H-ras is supplied as 0.1 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.

Procedure

See reference 7 and 10 for immunoprecipitation and immunofluorescence procedures.

Product Profile

The recommended working concentration for immunoprecipitation is 5 µg/ml using samples labeled with ^{35}S-Met. It is recommended to use breast cell lines and anti-trpE as positive and negative controls, respectively.

The working concentration for immuno-fluorescence is 2-10 µg/ml using SW 480 or Y1 cells.

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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