



c-H-ras (Ab-1)

Cat# OP23, OP23L

Background: The human *ras* gene family consists of three identified members, H, K and N-*ras*, encoding proteins of 188-189 amino acids and 21,000 (p21) molecular weight (1,2). Human H- and K-*ras* are the homologues of v-H- and v-K-*ras* sequences originally isolated from Harvey and Kirsten strains of rat sarcoma viruses (3,4). Normal human cellular *ras* genes can be activated 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 (for review see 5). Although the expression patterns of *ras* proto-oncogene proteins in normal human tissues are known (6), similar information for activated *ras* oncogene encoded p21's and their relevance to human disease diagnosis and prognosis is still emerging (7, 8, 9).

Origin: Clone F235-1.7.1 is a mouse monoclonal antibody generated by immunizing BALB/c mice with recombinant p21 protein and fusing with P3X63 Ag8.653 myeloma cells.

Characteristics:Isotype: IgG₁κ

Epitope: within residues 54-188

Species	human	mouse	rat	other
Reactivity	Y	Y	Y	NT

legend: Y=yes NT=not tested

Applications:

Immuno-Precipitation*	amount	label	positive control
	5 µg per reaction	³⁵ S-Met	ras 1 cells

Frozen Sections	amount	positive control	negative control
	5 µg/mL	normal skin	trpE (Ab-1)

Paraffin Sections	amount	detergent	enzyme	positive control	negative control
	5 µg/mL	saponin	pepsin	normal skin	trpE (Ab-1)

Western Blotting*	amount	chemi-luminescent	colori-metric	positive control
	10 µg/mL	NT	Y	ras 1 cells

Immuno-fluorescence	amount	positive control
	2.5 µg/mL	ras 1 cells

legend: Y=yes NT=not tested

*See Comments

How Supplied: 100 µg or 200 µg (Cat# OP23) of purified antibody in 1.0 mL of 0.05 M sodium phosphate buffer containing 0.1% sodium azide and 0.2% gelatin; or 100 µg (Cat# OP23L) purified antibody lyophilized from a volatile buffer with 100 µg of BSA. We recommend resuspending the lyophilized antibody with sterile phosphate buffered saline (PBS), pH 7.4, or sterile 20 mM Tris-saline (20 mM Tris containing 0.15 M NaCl), pH 7.4, to yield a final concentration of 100 µg/mL; product will be more stable if 0.1% sodium azide is included (do not add azide if antibody is to be used with viable cells). Lyophilized antibody should be resuspended at 4°C with occasional gentle mixing for at least two hours.

Storage: Store Cat# OP23 (in solution) at 4°C; do not freeze. Store Cat# OP23L (lyophilized) at 4°C until reconstituted, then store in aliquots at -20°C or at 4°C with 0.1% azide; freezing of aliquots is best for storage of reconstituted product for longer than a month, but repetitive freezing and thawing should be avoided. If stored under proper conditions, product guaranteed until expiration date stated.

Comments: For immunoprecipitation, use 5 µg Cat# OP23 per sample with 45 µL protein G plus agarose. The level of expression of p21^{ras} is variable in different tissues. For this reason, we recommend a concentration step prior to western blot analysis to obtain optimal results. A doublet may be seen due to farnesylation. c-H-ras (Ab-1) will react to C-H-ras and, weakly, to v-H-ras; it does not detect either c-K-ras or c-N-ras p21s under the conditions tested. Purified p21^{ras} proteins are also available for western blotting standards. Suggested starting concentrations are provided. Antibodies should be titrated for optimal results in individual systems.

References:

1. Shimizu, K., *et al.*, Proc. Natl. Acad. Sci. USA 80: 2112-2116, 1983.
2. Taparowsky, E., *et al.*, Cell 34: 581-586, 1983.
3. Ellis, R.W., *et al.*, Nature 292: 506-511, 1981.
4. Shih, T.Y., *et al.*, Nature 287: 686-691, 1980.
5. Bos, J.L. Cancer Res. 49: 4682-4689, 1989.
6. Furth, M. E., *et al.*, Oncogene 1: 47-58, 1987.
7. Rodenhuis, S. *et al.*, Cancer Res. (Suppl) 52: 2665s-2669s, 1992.
8. Sidransky, D., *et al.*, Science 256: 102-105, 1992.
9. Kraus, M.H., *et al.*, Proc. Natl. Acad. Sci. USA 81: 5384-5388, 1984.

© 1996 Calbiochem-Novabiochem, International
Cat# OP23, OP23L Rev. 22-Sep-98 BOF

ONCOGENE RESEARCH PRODUCTS

84 Rogers Street, Cambridge, MA 02142
Tel: 617 577-1639 800 662-2616
Fax: 617 577-8015 800 828-4871
E-Mail: customer.service@oncresprod.com
Web Pages: www.oncresprod.com

ORDERING INFORMATION

Research reagents may be ordered by mail at the address shown at left, by telephone, E-mail, or fax or from your local Oncogene Research Products supplier. Terms are net 30 days F.O.B. shipping point.

For research use only, not for use in diagnostic procedures



カリフォルニア・バイオ・ラボラトリーズ株式会社