

Background

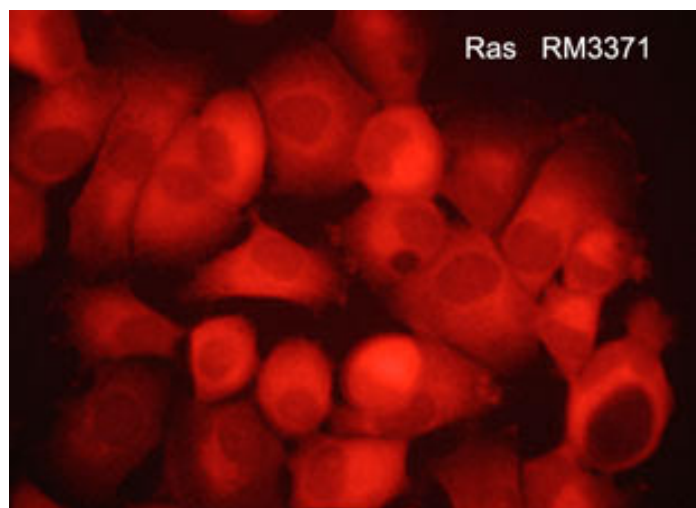
The Ras family (K-Ras, H-Ras, and N-Ras) includes 21 kDa guanine-nucleotide binding proteins that cycle between active (GTP-bound) and inactive (GDP-bound) forms. Receptor tyrosine kinases and G-protein-coupled receptors activate Ras, which then stimulates the Raf-MEK-MAP kinase pathway. Both GTPase-activating proteins (GAPs), such as p120 Ras-GAP, and guanine-nucleotide exchange factors (GEFs) regulate the activity of Ras proteins in many cell signaling pathways. Mutations in Ras are found in several cancers, and the most common oncogenic mutation is Gly12 to Asp (G12D), which prevents Ras inactivation.



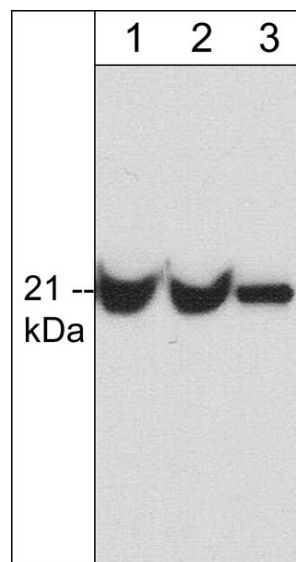
**Guaranteed
to
Outperform**

Background References

- Boguski, M.S. & McCormick, F. (1993) Nature 366:643.
Buday, L. & Downward, J. (1993) Cell 73:611.
Huang, D.C. et al. (1993) Mol. Cell Biol. 13:2420.
Ma, J. & Karplus, M. (1997) J. Mol. Biol. 274:114.



Immunocytochemical labeling of Ras in aldehyde-fixed and NP-40-permeabilized human NCI-H1915 lung carcinoma cells. The cells were labeled with mouse monoclonal anti-Ras (RM3371) antibody. The antibody was detected using appropriate secondary antibody conjugated to DyLight® 594.



Western blot of mouse brain (lane 1), human A431 (lane 2), and Jurkat (lane 3) lysates. The blot was probed with mouse monoclonal anti-Ras antibody at 1:500.

FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Immunogen

Uniprot ID: P01112

Clone (M337) was generated from a full-length recombinant human H-Ras sequence. This sequence has high homology to mouse and rat Ras, and may detect K-Ras and N-Ras .

Product Citations

Wang, M. et al. (2011) Mol Cancer Res. 9(1)36.
WB: human prostate cells

Buffer and Storage

Mouse monoclonal, protein A purified antibody is supplied in 100µl phosphate-buffered saline, 50% glycerol, 1 mg/ml BSA, and 0.05% sodium azide. Store at -20°C. Stable for 1 year.

Applications

WB	1:1000
ELISA	1:2000
ICC	1:100

Species Reactivity

Hu, Rt, Ms

Isotype: IgG1

End user should determine optimal dilution for their particular applications and experiments.
Western blot membranes were incubated with diluted antibody in 5% non-fat milk, Tris buffer, 0.04% Tween20 for 1 hour at room temperature.
Abbreviations: E = ELISA, ICC = immunocytochemistry, IHC = immunohistochemistry, IP = immunoprecipitation, MS = mass spectrometry, WB = western blot
Hu = Human, Ms = Mouse, Rt = Rat, Ck = Chicken, F = Frog, B = Bovine

Specificity

This antibody detects a 21 kDa* protein corresponding to the molecular mass of Ras on SDS-PAGE immunoblots of adult mouse brain, human A431, and human Jurkat cells.

*All molecular weights (MW) are confirmed by comparison to MW standards and to western blot mobilities of known proteins with similar MW.
"Native" western blot utilizes non-reducing sample buffer (no mercaptoethanol or SDS), normal SDS-PAGE gel electrophoresis, and no methanol in transfer buffers.

Related Products

- RM3351 RasGAP Mouse Monoclonal
- RK6080 Raf Phospho-Regulation Antibody Sampler Kit
- RP2031 B-Raf (S446)[C-Raf (S338)/A-Raf (S299)], phospho-specific Rabbit Polyclonal
- RP2011 B-Raf (N-terminus) Rabbit Polyclonal
- RP2901 C-Raf (S471)[B-Raf (S579)/A-Raf (S432)], phospho-specific Rabbit Polyclonal
- RM2081 C-Raf (N-terminal region) Mouse Monoclonal



FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.