

Rac1-GTP

Catalog Number: 26903

Gene Symbol: RAC1

Description: Anti-Rac1-GTP Mouse Monoclonal Antibody

Background: Small GTPases are a super-family of cellular signaling regulators. Rac belongs to the Rho sub-family of GTPases that regulate cell motility, cell division and gene transcription. GTP binding increases the activity of Rac, and the hydrolysis of GTP to GDP renders it inactive. GTP hydrolysis is aided by GTPase activating proteins (GAPs), while exchange of GDP for GTP is facilitated by guanine nucleotide exchange factors (GEFs).

Immunogen: Recombinant full-length protein of active Rac1

Tested Applications: IP, IHC, IF

Recommended Dilutions:

IP: 1 µg for 1~2 mg total cellular proteins
IHC, IF: 1:50-1:250

Concentration: 1 mg/ml

Host: Mouse

Clonality: Monoclonal

Isotype: IgM

Purity: Purified from ascites

Format: Liquid

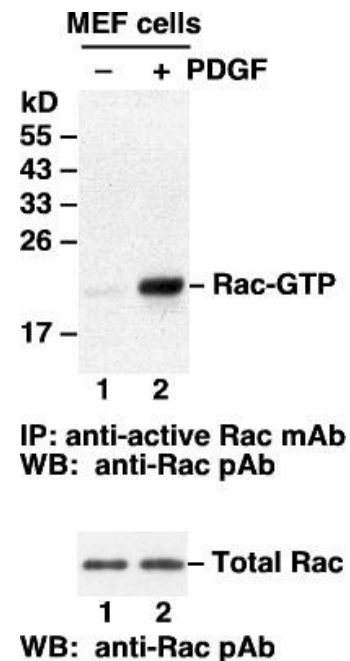
Preservative: No

Constituents: PBS (without Mg²⁺ and Ca²⁺), pH 7.4, 150 mM NaCl, 50% glycerol

Species Reactivity: Anti-Rac1-GTP mouse antibody recognizes only active Rac1 from vertebrates

Storage Conditions: Store at -20°C. Avoid repeated freezing and thawing

Immunoprecipitation and Western blot:

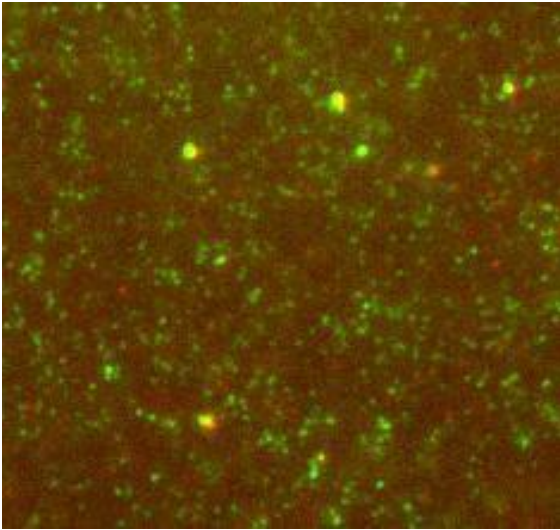


Rac Activation Assay.

MEF cells were treated with (lane 2) or without (lane 1) PDGF. Cell lysates were incubated with anti-Rac1-GTP monoclonal antibody (Cat. # 26903) (top panel). The precipitated Rac-GTP was immunoblotted with anti-Rac rabbit polyclonal antibody (Cat. # 21003). The bottom panel shows the Western blot with anti-Rac rabbit polyclonal antibody of the cell lysates used (5% of that used in the top panel).

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Immunohistochemistry:



Immunohistochemistry for Rac-GTP using Anti-Rac1-GTP Mouse Monoclonal Antibody (26903) shows Rac-GTP immunolabeling (green) in combination with cofilin (red) on brain tissue sections. The tissue sections were fixed with -20 °C methanol or 4% paraformaldehyde (fixation time 1hr) and stained with antibody at 1:1000 in 0.1M Phosphate buffer with 0.3% Triton X, and 4% BSA for 24h at room temperature. Secondary antibodies were anti-mouse AlexaFluor488 and anti-rabbit AlexaFluor594 at 1:1000.

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