

Anti-Rac1 Mouse mAb

Purified Recombinant Mouse Monoclonal Antibody

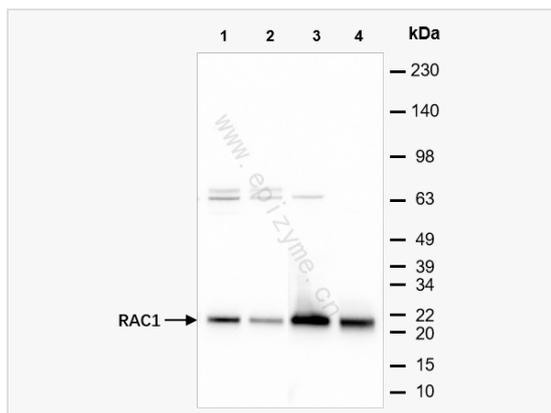
Catalog # M014680

Product Information

Application	WB, IHC-P/IF (Tissue-P), ELISA
Reactivity	Mouse (Cell), Human, Rat
Dilution	WB 1:1,000~1:2,000; IHC-P 1:100~1:200; IF 1:100~1:200
Host	Mouse
Clonality	Monoclonal
Clone No.	34N20L43
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human Rac1
Format	Affinity purified monoclonal antibody supplied in PBS with 0.01% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Rac1 Mouse mAb [34N20L43] is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Synonyms	Cell migration inducing gene 5 protein, Cell migration-inducing gene 5 protein, MGC111543, MIG5, Migration inducing gene 5, Migration inducing protein 5, p21 Rac1, p21-Rac1, Rac 1, RAC1, RAC1_HUMAN, Ras like protein TC25, Ras related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1), Ras-like protein TC25, Ras-related C3 botulinum toxin substrate 1, Rho family small GTP binding protein Rac1, TC 25, TC25.
Calculated MW	Calculated MW: 21 kDa; Observed MW: 21 kDa
Uniprot ID	P63000
Gene ID	5879
Background	Plasma membrane-associated small GTPase which cycles between active GTP-bound and inactive GDP-bound states. In its active state, binds to a variety of effector proteins to regulate cellular responses such as secretory processes, phagocytosis of apoptotic cells, epithelial cell polarization, neurons adhesion, migration and differentiation, and growth-factor induced formation of membrane ruffles (PubMed:1643658, PubMed:28886345). Rac1 p21/rho GDI heterodimer is the active component of the cytosolic factor sigma 1, which is involved in stimulation of the NADPH oxidase activity in macrophages. Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. Stimulates PKN2 kinase activity (PubMed:9121475). In concert with RAB7A, plays a role in regulating the formation of RBs (ruffled borders) in osteoclasts (PubMed:1643658). In podocytes, promotes nuclear shuttling of NR3C2; this modulation is required for a proper kidney functioning. Required for atypical chemokine receptor ACKR2-induced



Western Blot - Anti-Rac1 Mouse mAb [34N20L43]

All lanes: M014680 at 1:1,000 dilution

Lane 1: Raw264.7 (Mouse mononuclear macrophage leukemia cell) whole cell lysates

Lane 2: C2C12 (Mouse myoblasts epithelial cell) whole cell lysates

Lane 3: Rat spleen whole tissue lysates

Lane 4: Mouse small intestine whole tissue lysates

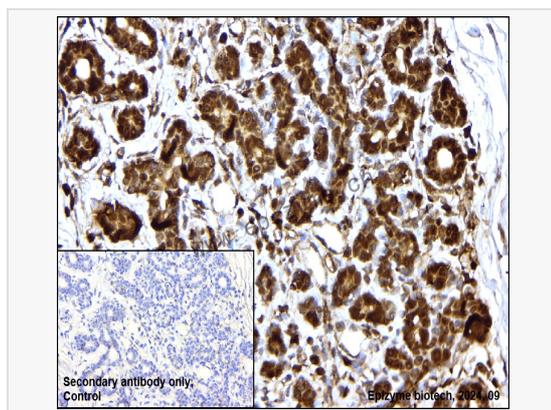
Lysates/proteins at 10 µg per lane.

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP Conjugated (Cat. No. LF101) at 1:5,000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa

Developed using the ECL technique (Cat. No. SQ201).



Immunohistochemistry - Anti-Rac1 Mouse mAb [34N20L43]

Sample: Paraformaldehyde-fixed, paraffin embedded human breast cancer tissue

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins.

Primary antibody: M014680 at 1:200 dilution

Secondary antibody: Goat Anti-Mouse IgG (H+L), HRP conjugated at 1:1,000 dilution

DAB was used as the chromogen.

Counter stained with hematoxylin.

Positive/negative staining were presented.

Only the secondary antibody was used as the negative control.