

Mouse Anti-RAC1/MIG5 [CPTC-RAC1-1]: MC0479, MC0479RTU7

Intended Use: For Research Use Only

Description: A large number of low molecular weight, GTP binding proteins of the Ras superfamily have been identified. These proteins regulate many fundamental processes in all eukaryotic cells such as growth, vesicle traffic and cytoskeletal organization. GTPase-activating proteins (GAPs) accelerate the intrinsic rate of GTP hydrolysis of Ras-related proteins, resulting in downregulation of their active form. RAC1 and RAC2 are 92% identical and share GTP binding and GTP hydrolysis motifs with other members of the Ras superfamily. RAC1 is expressed in a large number of different cell types. 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 (By similarity). Essential for the SPATA13-mediated regulation of cell migration and adhesion assembly and disassembly. RAC1 has been demonstrated to play a critical role in tumor progression of human colorectal adenocarcinoma cells. In one study, overexpression of Rac1 accelerated the tumorigenic process, whereas RAC1 inhibition completely suppressed tumor formation.

Specifications:

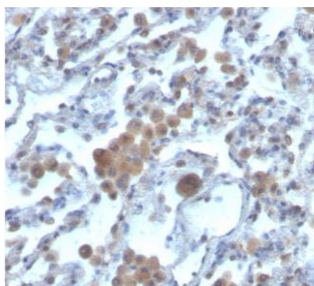
Clone: CPTC-RAC1-1
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human
 Immunogen: Recombinant human full-length RAC1 protein
 Localization: Membrane, melanosome
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, IF, WB
 Package:

Description	Catalog No.	Size
RAC1/MIG5 [CPTC-RAC1-1] Concentrated	MC0479	1 ml
RAC1/MIG5 [CPTC-RAC1-1] Prediluted	MC0479RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Breast, prostate, tonsil
 Concentrated Dilution: 50-200
 Pretreatment: Tris EDTA pH9.0 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human lung tissue stained with anti-RAC1 using DAB

References:

1. N-cadherin regulates signaling mechanisms required for lens fiber cell elongation and lens morphogenesis. Logan CM, et al. Dev Biol 428:118-134, 2017.
2. Src is activated by the nuclear receptor peroxisome proliferator-activated receptor β/d in ultraviolet radiation-induced skin cancer. Montagner A, et al. EMBO Mol Med 6:80-98, 2014.

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Rev. A