



# Ras-related C3 botulinum toxin substrate 1; Clone CPTC-RAC1-1 (Concentrate)

<b>Availability/Contents:</b>	<u><b>Item #</b></u>	<u><b>Volume</b></u>
	RA0656-C.1	0.1 ml
	RA0656-C.5	0.5 ml
	RA0656-C1	1 ml

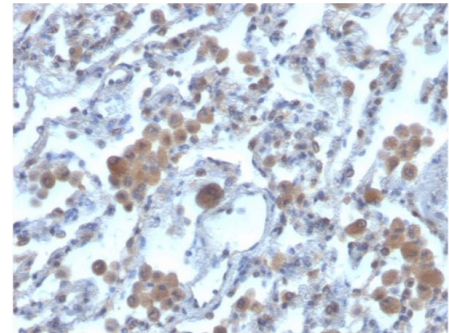
**Description:**

Species:	Mouse
Immunogen:	Recombinant human full-length RAC1protein
Clone:	CPTC-RAC1-1
Isotype:	IgG1 / Kappa
Entrez Gene ID:	5879
Hu Chromosome Loc.:	7p22.1
Synonyms:	Ras-related C3 botulinum toxin substrate 1, Cell migration-inducing gene 5 protein, Ras-like protein TC25, p21-Rac1, Cell migration-inducing gene 5 protein, MIG5, Rac-1, Ras-like protein TC25, Ras-related C3 botulinum toxin substrate 1
Mol. Weight of Antigen:	21kDa
Format:	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	Recognizes a protein identified as RAC1.
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 and growth-factor induced formation of membrane ruffles. 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 completed suppressed tumor formation.
Species Reactivity:	Human
Positive Control:	HeLa or Jurkat cells. Human breast, prostate or tonsil tissues.
Cellular Localization:	Cell junction, Cell membrane, Cell projection, Cytoplasm, Dendrite, Lamellipodium, Melanosome, Nucleus, Synapse
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 1-2 µg/ml Immunofluorescence: 1-3 µg/ml Western Blotting: 2-4 µg/ml
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C

 ScyTek Laboratories, Inc.  
 205 South 600 West  
 Logan, UT 84321  
 U.S.A.

**Uses/Limitations:** Not to be taken internally.  
 For Research Use Only.  
 This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
 Do not use if reagent becomes cloudy.  
 Do not use past expiration date.  
 Non-Sterile.



Formalin-fixed, paraffin-embedded human lung stained with RAC1 Mouse Monoclonal Antibody (CPTC-RAC1-1).

**Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)**

**Procedure:**

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with Tris-EDTA HIER Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (ScyTek catalog# CPL500).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).


**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
 Do not pipette by mouth.  
 Avoid contact of reagents and specimens with skin and mucous membranes.  
 Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


**References:**

1. Gao, Y., et al. Proc. Natl. Acad. Sci. U.S.A. (2004)
2. Espina, C., et al. Am. J. Pathol. (2008)

**Warranty:**

No products or “Instructions For Use (IFU)” are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

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