

## Ras-related C3 botulinum toxin substrate 1 Antibody

Mouse Monoclonal Antibody [Clone CPTC-RAC1-1]

| Catalog No      | Format  | Size   |
|-----------------|---|--------|
| 5879-MSM1-P0    | Purified Ab with BSA and Azide at 200ug/ml    | 20 ug  |
| 5879-MSM1-P1    | Purified Ab with BSA and Azide at 200ug/ml    | 100 ug |
| 5879-MSM1-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

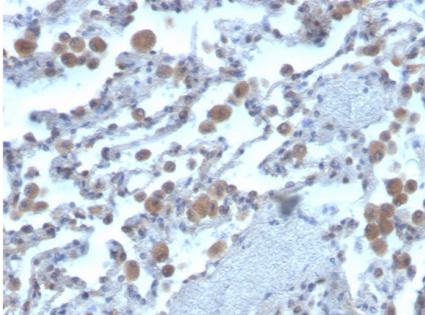
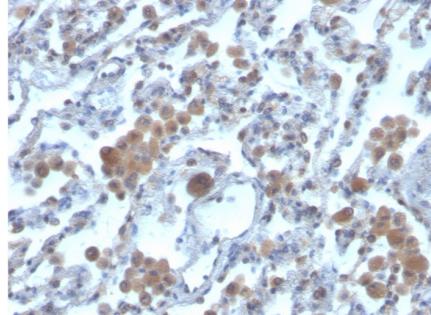
| Applications               | Tested Dillution | Note  |
|----------------------------|------------------|---|
| Immunofluorescence (IF)    | 1-3ug/ml         |   |
| Immunohistochemistry (IHC) | 1-2ug/ml         | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |
| Western Blot (WB)          | 2-4ug/ml         |   |

### Product Details

|                        |   |
|------------------------|---|
| Clone                  | CPTC-RAC1-1   |
| Gene Name              | RAC1  |
| Immunogen              | Recombinant human full-length RAC1protein   |
| Host                   | Mouse   |
| Clonality              | Monoclonal  |
| Isotype / Light Chain  | IgG1 / Kappa  |
| Mol. Weight of Antigen | 21kDa   |
| Cellular Localization  | Cell junction, Cell membrane, Cell projection, Cytoplasm, Dendrite, Lamellipodium, Melanosome, Nucleus, Synapse |
| Species Reactivity     | Human   |
| Positive Control       | HeLa or Jurkat cells. Human breast, prostate or tonsil tissues.   |

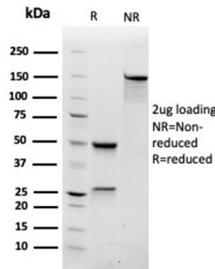
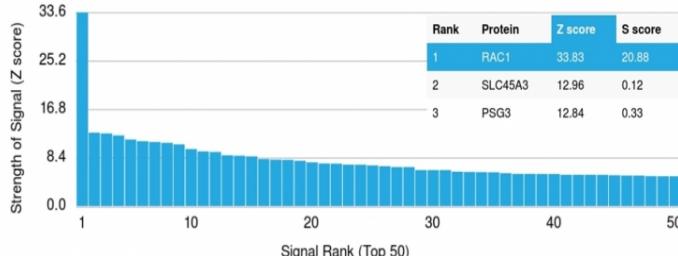
\*Optimal dilution for a specific application should be determined.

### Product Images for Ras-related C3 botulinum toxin substrate 1 Antibody



Formalin-fixed, paraffin-embedded human lung stained with RAC1Mouse Monoclonal Antibody (CPTC-RAC1-1).

Formalin-fixed, paraffin-embedded human lung stained with RAC1Mouse Monoclonal Antibody (CPTC-RAC1-1).



SDS-PAGE Analysis of Purified RAC1 Mouse Monoclonal Antibody (CPTC-RAC1-1). Confirmation of Integrity and Purity of Antibody.

Analysis of Protein Array containing more than 19,000 full-length human proteins using Ras-related C3 botulinum toxin substrate 1 Monoclonal Antibody (CPTC-RAC1-1). Z-score and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

## Specificity & Comments

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 completely suppressed tumor formation.

## Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

## Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## Research Areas

Cardiovascular, Developmental Biology, Immunology, BBB VCAM-1 Signaling, Infectious Disease, MAPK Signaling, Nuclear Marker, Signal Transduction