

## Human Ras-Related C3 Botulinum Toxin Substrate 1 (RAC1) ELISA Kit | RAC1 elisa kit

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CATALOG #  
**AAA331171**

REACTIVITY  
**Human**

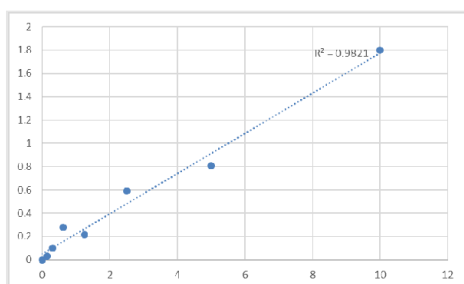
### PRODUCT SYNONYMS

Ras-Related C3 Botulinum Toxin Substrate 1 (RAC1); Human Ras-Related C3 Botulinum Toxin Substrate 1 (RAC1) ELISA Kit; RAC1; MGC111543; MIG5; TC-25; p21-Rac1; migration-inducing gene 5; ras-related C3 botulinum toxin substrate 1; rho family; small GTP binding protein Rac1; RAC1 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Reactivity              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity             | Human Ras-related C3 botulinum toxin substrate 1 (RAC1) ELISA Kit has high sensitivity and excellent specificity for detection of Human RAC1. No significant cross-reactivity or interference between Human RAC1 and analogues was observed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Sequence Length         | 192                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Assay Type              | Sandwich ELISA (Quantitative)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Samples                 | Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Detection Method        | Colorimetric                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Usage Notes             | <ul style="list-style-type: none"> <li>* Do not mix components from different kit lots or use reagents beyond the kit expiration date.</li> <li>* Allow all reagents to warm to room temperature for at least 30 minutes before opening.</li> <li>* Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination.</li> <li>* Unused wells must be kept desiccated at 4 degree C in the sealed bag provided.</li> <li>* Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes.</li> <li>* It is recommended that all samples and standards be assayed in duplicate or triplicate.</li> </ul> |
| Preparation and Storage | Store at 2-8 degree C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

### IMAGES



**Standard Curve (Sample)**

Fig.1. Human Ras-related C3 botulinum toxin substrate 1 (RAC1) Standard Curve.

ADDITIONAL INFORMATION

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| Related Product Information for RAC1 elisa kit | <p>Description: This Human Ras-related C3 botulinum toxin substrate 1 (RAC1) ELISA Kit employs a two-site sandwich ELISA to quantitate RAC1 in samples. An antibody specific for RAC1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any RAC1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for RAC1 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of RAC1 bound in the initial step. The color development is stopped and the intensity of the color is measured.</p> <p>Background: Rac1 is a GTPase which belongs to the RAS superfamily of small GTP-binding proteins. Members of this superfamily appear to regulate a diverse array of cellular events, including the control of cell growth, cytoskeletal reorganization, and the activation of protein kinases. Two transcript variants encoding different isoforms have been found for this gene. This mutant did bind to POR1 and it induced membrane ruffling and transformation. A second RAC mutant, which bound PAK but not POR1, induced JNK activation but was defective in inducing membrane ruffling and transformation. The authors concluded that the effects of RAC on the JNK cascade and on actin polymerization and cell proliferation are mediated by distinct effector functions that diverge at the level of RAC itself.</p> |
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NCBI AND UNIPROT INFORMATION

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|----------------------------------|--------------------------------------------|
| NCBI GI #                        | 51702787                                   |
| NCBI GeneID                      | 5879                                       |
| UniProt Accession #              | P63000                                     |
| NCBI Official Full Name          | Ras-related C3 botulinum toxin substrate 1 |
| NCBI Official Synonym Full Names | Rac family small GTPase 1                  |
| NCBI Official Symbol             | RAC1                                       |
| NCBI Official Synonym Symbols    | MIG5; MRD48; Rac-1; TC-25; p21-Rac1        |
| NCBI Protein Information         | ras-related C3 botulinum toxin substrate 1 |
| UniProt Protein Name             | Ras-related C3 botulinum toxin substrate 1 |
| UniProt Gene Name                | <b>RAC1</b>                                |
| UniProt Synonym Gene Names       | TC25                                       |
| UniProt Entry Name               | RAC1_HUMAN                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)  
Online datasheet: <https://stage.aaabiotech.com/human-elisa-kits/ras-related-c3-botulinum-toxin-substrate-1-rac1/331171>