

Human RAC 1/2/3 antibody

Catalog Number: ATGA0589

PRODUCT INFORMATION

Catalog number

ATGA0589

Clone No.

AT2G10

Product type

Monoclonal antibody

UnitProt No.

P15153

NCBI Accession No.

NP_002863

Alternative Names

as-related C3 botulinum toxin substrate 3, Cell migration-inducing gene 5 protein, EN-7, Gx, HSPC022, MIG 5, MIG5, Migration inducing gene 5, Migration inducing protein 5, p21 Rac1, p21 Rac2, p21 Rac3, RAC1, Rac1B, RAC2, RAC3, Ras like protein TC25, Ras related C3 botulinum substrate 1, Ras related C3 botulinum substrate 2, Ras related C3 botulinum substrate 3, Ras related C3 botulinum toxin substrate 1, Ras related C3 botulinum toxin substrate 1 isoform Rac1, Ras related C3 botulinum toxin substrate 1 isoform Rac1 MGC111543, Ras related C3 botulinum toxin substrate 2, Ras related C3 botulinum toxin substrate 3, Rho family small GTP binding protein Rac1, Rho family small GTP binding protein Rac2, Rho family small GTP binding protein Rac3, RP23-84C12.18, Small G protein, TC 25

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human RAC2 (1-189aa) protein purified from E. coli

Isotype

IgG2b kappa

Purification Note

By protein-A affinity chromatography

Application

ELISA, WB, FACS

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Usage

The antibody has been tested by ELISA, Western blot and FACS analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.

Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

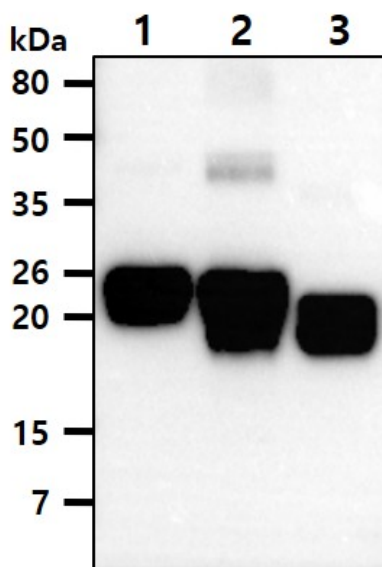
Rac is a subfamily of the Rho family of GTPases, small (~21 kDa) signaling G proteins (more specifically a GTPase). When bound to GTP, Rac is activated. In its activated state, Rac participates in the regulation of cell movement, through its involvement in structural changes to the actin Cytoskeleton. Rac is small GTPases that have been linked to multiple human cancers and are implicated in epithelial to mesenchymal transition, cell-cycle progression, migration/invasion, tumor growth, angiogenesis, and oncogenic transformation.

General References

Ridley AJ. (2006). Trends Cell Biol. 16(10):522-529.
Maldonado MDM., et al. (2018). Cancer Res. 15;78(12):3101-3111.

DATA

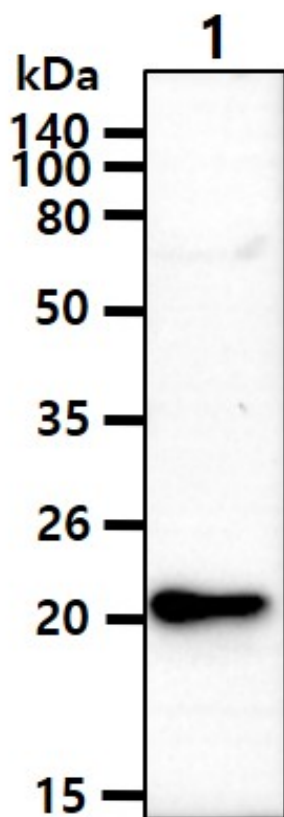
Western blot analysis (WB)



The recombinant proteins (50ng) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Rac1,2,3 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: Recombinant human Rac 1 protein
Lane 2.: Recombinant human Rac 2 protein
Lane 3.: Recombinant human Rac 3 protein

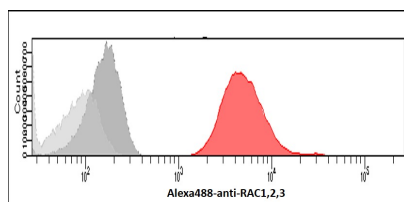
Human RAC 1/2/3 antibody

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The cell lysate (40ug) was resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human Rac1,2,3 antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.
Lane 1.: Jurkat cell lysate

Flow cytometry (FACS)



Flow cytometry analysis of Rac1,2,3 in Jurkat cells. The cell was stained with ATGA0589 at 2-5ug for 1×10^6 cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (dark gray), cells without incubation with primary and secondary antibody was used as the negative control (light gray).