

Datasheet for ABIN5009855

anti-RIT1 antibody (AA 141-219) (AbBy Fluor® 680)[Go to Product page](#)

Overview

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| Quantity: | 100 µL |
| Target: | RIT1 |
| Binding Specificity: | AA 141-219 |
| Reactivity: | Human |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This RIT1 antibody is conjugated to AbBy Fluor® 680 |
| Application: | Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)) |

Product Details

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| Immunogen: | KLH conjugated synthetic peptide derived from human RIT1 |
| Isotype: | IgG |
| Predicted Reactivity: | Human, Mouse, Rat, Dog, Cow, Sheep, Pig, Rabbit |
| Purification: | Purified by Protein A. |

Target Details

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|-------------------|---|
| Target: | RIT1 |
| Alternative Name: | RIT1 (RIT1 Products) |
| Background: | Synonyms: GTP binding protein Roc1, GTP-binding protein Rit1, Ras like protein expressed in |

Target Details

many tissues, Ras like without CAAX 1, Ras-like protein expressed in many tissues, Ras-like without CAAX protein 1, RIBB, Ric like expressed in many tissues, RIT, RIT1, RIT1_HUMAN, ROC1.

Background: Plays a crucial role in coupling NGF stimulation to the activation of both EPHB2 and MAPK14 signaling pathways and in NGF-dependent neuronal differentiation. Neuronal activity dramatically increases the concentration of cytosolic Ca²⁺, which then serves as a second messenger to direct diverse cellular responses. Calmodulin is a primary mediator of Ca²⁺ signals in the nervous system. Ric, a protein related to the Ras subfamily of small GTPases, has the ability to bind calmodulin. In addition, two Ras-like human proteins, Rin and Rit (Ric-related gene expressed in many tissues), which are 71 % and 66 % identical to RIC respectively, share related G2 domains with Ric. While most members of the Ras subfamily are plasma membrane-associated and generally require a C-terminal isoprenyl group to bind to the plasma membrane, Rit and Rin lack the recognition signal for C-terminal prenylation.

Transiently expressed Rit and Rin are plasma membrane-localized because both proteins contain a C-terminal cluster of basic amino acids, which provides a mechanism for membrane association. Rin binds calmodulin through a C-terminal binding motif. Rit and Ric are widely expressed, whereas expression of Rin is restricted to the neuron system. In conclusion, Rit and Rin define a novel subfamily of Ras-related proteins

Gene ID: 6016

Pathways: [Neurotrophin Signaling Pathway](#)

Application Details

Application Notes: IF(IHC-P) 1:50-200
IF(IHC-F) 1:50-200
IF(ICC) 1:50-200

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 1 µg/µL

Buffer: Aqueous buffered solution containing 0.01M TBS (pH 7.4) with 1 % BSA, 0.03 % Proclin300 and 50 % Glycerol.

Preservative: ProClin

Handling

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|--------------------|--|
| Precaution of Use: | This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only. |
| Storage: | -20 °C |
| Storage Comment: | Store at -20°C. Aliquot into multiple vials to avoid repeated freeze-thaw cycles. |
| Expiry Date: | 12 months |