

Rabbit RIOK1/RIO1 Polyclonal Antibody | anti-RIOK1 antibody

Anti-RIOK1/RIO1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125813	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

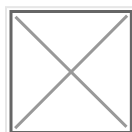
PRODUCT SYNONYMS

RIOK1/RIO1; Polyclonal Antibody; Anti-RIOK1/RIO1 Antibody; RIOK1; RIO1; Serine/threonine-protein kinase RIO1; EC 2. 7. 11. 1; EC 3. 6. 3. -; RIO kinase 1; anti-RIOK1 antibody

PRODUCT SPECIFICATIONS

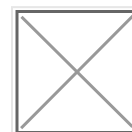
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for RIOK1/RIO1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-RIOK1 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E Coli-derived human RIOK1/RIO1 recombinant protein (Position: M1-K222).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of HL-60 cells using anti-RIOK1/RIO1 antibody (AAA125813). Overlay histogram showing HL-60 cells stained with AAA125813 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-RIOK1/RIO1 Antibody (AAA125813, 1μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of RIOK1/RIO1 using anti-RIOK1/RIO1 antibody (AAA125813). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30ug of sample under reducing conditions. Lane 1: human K562 whole cell lysates Lane 2: human HEK293 whole cell lysates Lane 3: human HepG2 whole cell lysates Lane 4: human PC-3 whole cell lysates Lane 5: rat testicular tissue lysates Lane 6: mouse testicular tissue lysates Lane 7: mouse SP2/0 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-RIOK1/RIO1 antigen affinity purified polyclonal antibody (Catalog # AAA125813) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for RIOK1/RIO1 at approximately 66KD. The expected band size for RIOK1/RIO1 is at 66KD.

ADDITIONAL INFORMATION

Related Product Information for anti-RIOK1 antibody	Serine/threonine-protein kinase RIO1 is an enzyme that in humans is encoded by the RIOK1 gene. The protein encoded by this gene competes with pICln for inclusion in the protein arginine methyltransferase 5 complex. This complex targets substrates for dimethylation. The encoded protein is essential for the last steps in the maturation of 40S subunits.
References	1. Ameismeier, M., Cheng, J., Berninghausen, O., Beckmann, R. Visualizing late states of human 40S ribosomal subunit maturation. Nature 558: 249-253, 2018. 2. Guderian, G., Peter, C., Wiesner, J., Sickmann, A., Schulze-Osthoff, K., Fischer, U., Grimmeler, M. RioK1, a new interactor of protein arginine methyltransferase 5 (PRMT5), competes with pICln for binding and modulates PRMT5 complex composition and substrate specificity. J. Biol. Chem. 286: 1976-1986, 2011 3. Hartz, P. A. Personal Communication. Baltimore, Md. 10/31/2017.

NCBI AND UNIPROT INFORMATION

NCBI GI #	23510356
NCBI GeneID	83732
NCBI Accession #	NP_113668.2
NCBI GenBank Nucleotide #	NM_031480.2
UniProt Accession #	Q9BRS2; Q8NDC8; Q96NV9; B2RB28
Molecular Weight	65,583 Da
NCBI Official Full Name	serine/threonine-protein kinase RIO1 isoform 1
NCBI Official Synonym Full Names	RIO kinase 1
NCBI Official Symbol	RIOK1
NCBI Official Synonym Symbols	AD034; RRP10; bA288G3.1
NCBI Protein Information	serine/threonine-protein kinase RIO1
UniProt Protein Name	Serine/threonine-protein kinase RIO1
UniProt Gene Name	RIOK1

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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/riok1-rio1-antibody-direct-elisa-flow-cytometry-western-blot-elisa/125813>