

## Human Serine/Threonine-Protein Kinase RIO1 (RIOK1) ELISA Kit | RIOK1 elisa kit

Human Serine/Threonine-Protein Kinase RIO1 (RIOK1) ELISA Kit

CATALOG #  
**AAA330994**

REACTIVITY  
**Human**

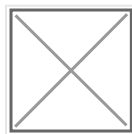
### PRODUCT SYNONYMS

Serine/Threonine-Protein Kinase RIO1 (RIOK1); Human Serine/Threonine-Protein Kinase RIO1 (RIOK1) ELISA Kit; RIOK1; AD034; FLJ30006; MGC12903; bA288G3.1; RIO kinase 1; prematurely truncated due to insertion of intronic sequence; RIOK1 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| Reactivity              | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity             | Human Serine/threonine-protein kinase RIO1 (RIOK1) ELISA Kit has high sensitivity and excellent specificity for detection of Human RIOK1. No significant cross-reactivity or interference between Human RIOK1 and analogues was observed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Sequence Length         | 568                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 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 Serine/threonine-protein kinase RIO1 (RIOK1) Standard Curve.

ADDITIONAL INFORMATION

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|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for RIOK1 elisa kit | <p>Description: This Human Serine/threonine-protein kinase RIO1 (RIOK1) ELISA Kit employs a two-site sandwich ELISA to quantitate RIOK1 in samples. An antibody specific for RIOK1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any RIOK1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for RIOK1 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 RIOK1 bound in the initial step. The color development is stopped and the intensity of the color is measured.</p> <p>Background: RIOK1 includes two alternatively spliced transcript variants, which encode different isoforms. The function of this gene has not been determined. RioK1, a new interactor of protein arginine methyltransferase 5 (PRMT5), competes with pICln for binding and modulates PRMT5 complex composition and substrate specificity. RioK1 and pICln bind to PRMT5 in a mutually exclusive fashion. This results in a PRMT5-WD45/MEP50 core structure that either associates with pICln or RioK1 in distinct complexes. RioK1 functions in analogy to pICln as an adapter protein by recruiting the RNA-binding protein nucleolin to the PRMT5 complex for its symmetrical methylation. The exclusive interaction of PRMT5 with either pICln or RioK1 thus provides the first mechanistic insight into how a methyltransferase can distinguish between its substrate proteins.</p> |
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NCBI AND UNIPROT INFORMATION

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|----------------------------------|------------------------------------------------|
| NCBI GI #                        | 23510356                                       |
| NCBI GeneID                      | 83732                                          |
| NCBI Accession #                 | NP_113668.2                                    |
| NCBI GenBank Nucleotide #        | NP_113668.2                                    |
| UniProt Accession #              | Q9BRS2                                         |
| 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    | RIO1; 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/human-elisa-kits/serine-threonine-protein-kinase-rio1-riok1/330994>