

## Rat Extracellular Signal Regulated Kinase 1 (ERK1) ELISA Kit | ERK1 elisa kit

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CATALOG #  
**AAA68401**

REACTIVITY  
**Rat**

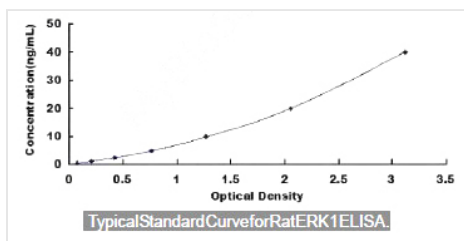
### PRODUCT SYNONYMS

Extracellular Signal Regulated Kinase 1 (ERK1); Rat Extracellular Signal Regulated Kinase 1 (ERK1) ELISA Kit; HS44KDAP; HUMKER1A; P44ERK1; P44MAPK; PRKM3; MAPK3; ERT2; Mitogen-Activated Protein Kinase 3; Insulin-stimulated MAP2 kinase; Microtubule-associated protein 2 kinase; ERK1 elisa kit

### PRODUCT SPECIFICATIONS

|                       |                                                                                                                                                                                                          |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity            | Rat                                                                                                                                                                                                      |
| Specificity           | This assay has high sensitivity and excellent specificity for detection of ERK1. No significant cross-reactivity or interference between ERK1 and analogues was observed.                                |
| Sequence Length       | 380                                                                                                                                                                                                      |
| Samples               | Serum, plasma, tissue homogenates, cell lysates, cell culture supernates or other biological fluids                                                                                                      |
| Assay Type            | Quantitative Sandwich                                                                                                                                                                                    |
| Detection Range       | 0.625-40ng/mL                                                                                                                                                                                            |
| Sensitivity           | <0.249ng/mL.                                                                                                                                                                                             |
| Intra-assay Precision | Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level ERK1 were tested 20 times on one plate, respectively. Intra-Assay: CV<10%                                   |
| Inter-assay Precision | Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level ERK1 were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12% |

### IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for ERK1 elisa kit | <p>Intended Uses: The kit is a sandwich enzyme immunoassay for the in vitro quantitative measurement of ERK1 in rat serum, plasma, tissue homogenates, cell lysates, cell culture supernates or other biological fluids.</p> <p>Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to ERK1. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to ERK1. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain ERK1, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm +/- 10nm. The concentration of ERK1 in the samples is then determined by comparing the O.D. of the samples to the standard curve.</p> |
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NCBI AND UNIPROT INFORMATION

|                                  |                                                                     |
|----------------------------------|---------------------------------------------------------------------|
| NCBI GI #                        | 8393331                                                             |
| NCBI GeneID                      | 50689                                                               |
| NCBI Accession #                 | NP_059043.1                                                         |
| NCBI GenBank Nucleotide #        | NM_017347.2                                                         |
| UniProt Accession #              | P21708; Q4PIY8; Q62686; Q9JJ13                                      |
| Molecular Weight                 | 45,770 Da                                                           |
| NCBI Official Full Name          | mitogen-activated protein kinase 3                                  |
| NCBI Official Synonym Full Names | mitogen activated protein kinase 3                                  |
| NCBI Official Symbol             | Mapk3                                                               |
| NCBI Official Synonym Symbols    | p44; ERK1; ERT2; MNK1; Erk-1; Esrk1; MAPK1; Prkm3; p44erk1; p44mapk |
| NCBI Protein Information         | mitogen-activated protein kinase 3                                  |
| UniProt Protein Name             | Mitogen-activated protein kinase 3                                  |
| UniProt Gene Name                | Mapk3                                                               |
| UniProt Synonym Gene Names       | Erk1; Prkm3; MAP kinase 3; MAPK 3; ERK-1; p44-MAPK                  |

**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/rat-elisa-kits/extracellular-signal-regulated-kinase-1-erk1/68401>