

## Rat Period Circadian Protein 2 (PER2) ELISA Kit | PER2 elisa kit

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|-------------------------------|--------------------------|
| CATALOG #<br><b>AAA136120</b> | REACTIVITY<br><b>Rat</b> |
|-------------------------------|--------------------------|

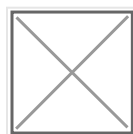
### PRODUCT SYNONYMS

Period Circadian Protein 2 (PER2); Rat Period Circadian Protein 2 (PER2) ELISA Kit; FASPS; Circadian clock protein PERIOD 2; PER2 elisa kit

### PRODUCT SPECIFICATIONS

|                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                                        | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Specificity                                       | This assay has high sensitivity and excellent specificity for detection of Period Circadian Protein 2 (PER2). No significant cross-reactivity or interference between Period Circadian Protein 2 (PER2) and analogues was observed.                                                                                                                                                                                                                                                        |
| Sequence Length                                   | 1255                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Assay Type                                        | Double-antibody Sandwich                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Samples                                           | Tissue homogenates, Cell lysates, Cell culture supernates and other biological fluids                                                                                                                                                                                                                                                                                                                                                                                                      |
| Detection Range                                   | 0.312-20ng/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Sensitivity                                       | 0.131ng/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Application                                       | Enzyme-linked immunosorbent assay for Antigen Detection.                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Intra-assay Precision (Precision within an assay) | 3 samples with low, middle and high level Period Circadian Protein 2 (PER2) were tested 20 times on one plate, respectively.                                                                                                                                                                                                                                                                                                                                                               |
| Inter-assay Precision (Precision between assays)  | 3 samples with low, middle and high level Period Circadian Protein 2 (PER2) were tested on 3 different plates, 8 replicates in each plate.                                                                                                                                                                                                                                                                                                                                                 |
| CV(%) =                                           | SD/meanX100                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Intra-Assay                                       | CV<10%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Inter-Assay                                       | CV<12%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Preparation and Storage                           | The stability of kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.<br>To minimize extra influence on the performance, operation procedures and lab conditions, especially room temperature, air humidity, incubator temperature should be strictly controlled. It is also strongly suggested that the whole assay is performed by the same operator from the beginning to the end. |

### IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
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| Related Product Information for PER2 elisa kit | The test principle applied in this kit is Sandwich enzyme immunoassay. The microtiter plate provided in this kit has been pre-coated with an antibody specific to Period Circadian Protein 2 (PER2). Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Period Circadian Protein 2 (PER2). 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 Period Circadian Protein 2 (PER2), 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 Period Circadian Protein 2 (PER2) in the samples is then determined by comparing the O.D. of the samples to the standard curve. |
| Product Categories/Family for PER2 elisa kit   | Neuroscience; Circadian rhythm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

NCBI AND UNIPROT INFORMATION

|                                  |                                        |
|----------------------------------|----------------------------------------|
| NCBI GI #                        | 12707562                               |
| NCBI GeneID                      | 8864                                   |
| NCBI Accession #                 | NP_073728.1                            |
| NCBI GenBank Nucleotide #        | NM_022817.2                            |
| UniProt Accession #              | O15055; Q4ZG49; Q6DT41; Q9UQ45; A2I2P7 |
| Molecular Weight                 | 45,175 Da                              |
| NCBI Official Full Name          | period circadian protein homolog 2     |
| NCBI Official Synonym Full Names | period circadian clock 2               |
| NCBI Official Symbol             | PER2                                   |
| NCBI Official Synonym Symbols    | FASPS; FASPS1                          |
| NCBI Protein Information         | period circadian protein homolog 2     |
| UniProt Protein Name             | Period circadian protein homolog 2     |
| UniProt Gene Name                | PER2                                   |
| UniProt Synonym Gene Names       | KIAA0347; hPER2                        |
| UniProt Entry Name               | PER2_HUMAN                             |

**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/period-circadian-protein-2-per2/136120>