



# Mouse Phenylalanine-4-hydroxylase(PAH) ELISA kit

|                                     |  |
|-------------------------------------|--|
| <b>Product Code</b>                 | CSB-EL017396MO   |
| <b>Protein Biological Process 2</b> | Amino-acid biosynthesis and metabolism   |
| <b>Abbreviation</b>                 | PAH  |
| <b>Protein Biological Process 1</b> | Biosynthesis/Metabolism  |
| <b>Target Name</b>                  | phenylalanine hydroxylase  |
| <b>Uniprot No.</b>                  | P16331   |
| <b>Alias</b>                        | PH, PKU, PKU1  |
| <b>Product Type</b>                 | ELISA Kit  |
| <b>Immunogen Species</b>            | Mus musculus (Mouse)   |
| <b>Protein Biological Process 3</b> | Phenylalanine catabolism   |
| <b>Sample Types</b>                 | serum, plasma, tissue homogenates, cell lysates  |
| <b>Detection Range</b>              | 23.5 pg/mL-1500 pg/mL  |
| <b>Sensitivity</b>                  | 5.8 pg/mL  |
| <b>Assay Time</b>                   | 1-5h   |
| <b>Sample Volume</b>                | 50-100ul   |
| <b>Detection Wavelength</b>         | 450 nm   |
| <b>Lead Time</b>                    | 3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.   |
| <b>Research Area</b>                | Metabolism   |
| <b>Gene Names</b>                   | Pah  |
| <b>Tag Info</b>                     | quantitative   |
| <b>Protein Description</b>          | Sandwich   |
| <b>Description</b>                  | This Mouse PAH ELISA Kit was designed for the quantitative measurement of Mouse PAH protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 23.5 pg/mL-1500 pg/mL and the sensitivity is 5.8 pg/mL. |
| <b>Target Details</b>               | PAH encodes the enzyme phenylalanine hydroxylase that is the rate-limiting step in phenylalanine catabolism. Deficiency of this enzyme activity results in the autosomal recessive disorder phenylketonuria.   |



**Product Precision**

**Intra-assay Precision (Precision within an assay): CV%<8%**

Three samples of known concentration were tested twenty times on one plate to assess.

**Inter-assay Precision (Precision between assays): CV%<10%**

Three samples of known concentration were tested in twenty assays to assess.

**Linearity**

To assess the linearity of the assay, samples were spiked with high concentrations of mouse PAH in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

| ?   | Sample    | Serum(n=4) |
|-----|-----------|------------|
| 1:1 | Average % | 104        |
|     | Range %   | 101-109    |
| 1:2 | Average % | 95         |
|     | Range %   | 91-99      |
| 1:4 | Average % | 86         |
|     | Range %   | 83-89      |
| 1:8 | Average % | 92         |
|     | Range %   | 87-96      |

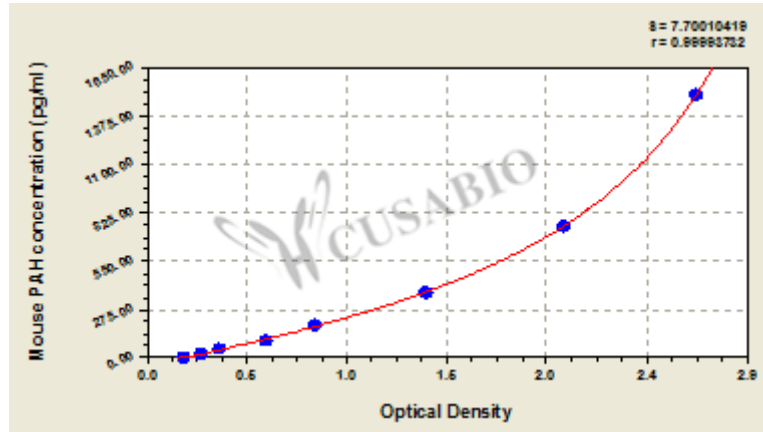
**Recovery**

The recovery of mouse PAH spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

| Sample Type       | Average % Recovery | Range |
|-------------------|--------------------|-------|
| Serum (n=5)       | 86                 | 83-89 |
| EDTA plasma (n=4) | 89                 | 85-96 |

**Typical**

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



| pg/ml | OD1   | OD2   | Average | Corrected |
|-------|-------|-------|---------|-----------|
| 1500  | 2.646 | 2.701 | 2.674   | 2.481     |
| 750   | 2.063 | 2.000 | 2.032   | 1.839     |
| 375   | 1.324 | 1.405 | 1.365   | 1.172     |
| 187.5 | 0.826 | 0.834 | 0.830   | 0.637     |
| 94    | 0.593 | 0.587 | 0.590   | 0.397     |
| 47    | 0.362 | 0.371 | 0.367   | 0.174     |
| 23.5  | 0.278 | 0.284 | 0.281   | 0.088     |
| 0     | 0.192 | 0.194 | 0.193   | ?         |

**MsdS**

{\"0\": {\"fileurl\": \"https://www.cusabio.com/uploadfile/msds/MSDS CSB-EL017396MO.pdf\", \"filename\": \"MSDS\"}}