

## Rat Mucin 1 (MUC1) ELISA Kit | MUC1 elisa kit

Rat Mucin 1 (MUC1) ELISA Kit

CATALOG #  
**AAA20768**

REACTIVITY  
**Rat**

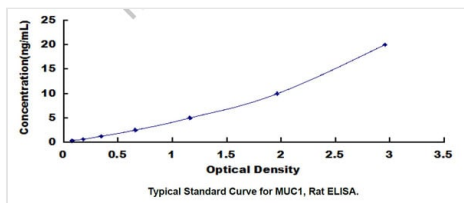
### PRODUCT SYNONYMS

Mucin 1 (MUC1); Rat Mucin 1 (MUC1) ELISA Kit; CD227; EMA; H23AG; KL-6; PEM; PEMT; PUM; CA15-3; Cancer antigen 15-3; Carcinoma-associated mucin; Episialin; Peanut-reactive urinary mucin; Polymorphic epithelial mucin; MUC1 elisa kit

### PRODUCT SPECIFICATIONS

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity              | Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Specificity             | This assay has high sensitivity and excellent specificity for detection of MUC1. No significant cross-reactivity or interference between MUC1 and analogues was observed.                                                                                                                                                                                                                                                                                                                  |
| Sequence Length         | 259                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Assay Type              | Quantitative Sandwich                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Samples                 | Rat serum, plasma, saliva, tissue homogenates, cell lysates, cell culture supernates and other biological fluids                                                                                                                                                                                                                                                                                                                                                                           |
| Detection Range         | 0.312-20ng/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Sensitivity             | < 0.122ng/mL                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Intra-assay Precision   | Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level MUC1 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 MUC1 were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. 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

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for MUC1 elisa kit | <p>Principle of the Assay: The microplate provided in this kit has been pre-coated with an antibody specific to MUC1. Standards or samples are then added to the appropriate microplate wells with a biotin-conjugated antibody specific to MUC1. 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 MUC1, 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 <math>\pm</math> 10nm. The concentration of MUC1 in the samples is then determined by comparing the O.D. of the samples to the standard curve.</p> <p>Intended Uses: The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of MUC1 in rat serum, plasma, saliva, tissue homogenates, cell lysates, cell culture supernates and other biological fluids.</p> |
| Product Categories/Family for MUC1 elisa kit   | Tumor immunity; Infection immunity; Pulmonology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| References                                     | Effects of Topical Mucolytic Agents on the Tears and Ocular Surface: A Plausible Animal Model of Mucin-Deficient Dry Eye; Invest Ophthalmol Vis Sci; 2018 Jun 1;59(7):3104-3114.; PMID: 30025127; Xiangzhe Li; Department of Ophthalmology, Korea University College of Medicine, Seoul, South Korea.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                               |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 65301117                                                                                                                      |
| NCBI GeneID                      | 4582                                                                                                                          |
| NCBI Accession #                 | NP_002447.4                                                                                                                   |
| NCBI GenBank Nucleotide #        | NM_002456.5                                                                                                                   |
| UniProt Accession #              | P15941; P13931; P15942; P17626; A5YRV1; A6ZID9; A6ZIE0; B1AVQ8; B1AVR0; B6ECA1; E7ESE5; E7EUG9                                |
| Molecular Weight                 | 28,297 Da                                                                                                                     |
| NCBI Official Full Name          | mucin-1 isoform 1                                                                                                             |
| NCBI Official Synonym Full Names | mucin 1, cell surface associated                                                                                              |
| NCBI Official Symbol             | MUC1                                                                                                                          |
| NCBI Official Synonym Symbols    | EMA; MCD; PEM; PUM; KL-6; MAM6; MCKD; PEMT; CD227; H23AG; MCKD1; MUC-1; ADMCKD; ADMCKD1; CA 15-3; MUC-1/X; MUC1/ZD; MUC-1/SEC |
| NCBI Protein Information         | mucin-1                                                                                                                       |
| UniProt Protein Name             | Mucin-1                                                                                                                       |
| UniProt Gene Name                | <b>MUC1</b>                                                                                                                   |
| UniProt Synonym Gene Names       | PUM; MUC-1; CA 15-3; KL-6; PUM; PEM; EMA; MUC1-NT; MUC1-alpha; MUC1-beta                                                      |
| UniProt Entry Name               | MUC1_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)

Online datasheet: <https://www.aaabiotech.com/rat-elisa-kits/mucin-1-muc1/20768>