



# Human Ubiquitin-like modifier-activating enzyme ATG7(ATG7) ELISA kit

|                                     |                                                                                                                                                                                                                                                                                                           |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Code</b>                 | CSB-EL002294HU                                                                                                                                                                                                                                                                                            |
| <b>Abbreviation</b>                 | ATG7                                                                                                                                                                                                                                                                                                      |
| <b>Protein Biological Process 1</b> | Apoptosis/Autophagy                                                                                                                                                                                                                                                                                       |
| <b>Target Name</b>                  | ATG7 autophagy related 7 homolog (S. cerevisiae)                                                                                                                                                                                                                                                          |
| <b>Uniprot No.</b>                  | O95352                                                                                                                                                                                                                                                                                                    |
| <b>Alias</b>                        | APG7-LIKE, APG7L, DKFZp434N0735, GSA7, APG7 autophagy 7-like ubiquitin activating enzyme E1-like protein                                                                                                                                                                                                  |
| <b>Product Type</b>                 | ELISA Kit                                                                                                                                                                                                                                                                                                 |
| <b>Immunogen Species</b>            | Homo sapiens (Human)                                                                                                                                                                                                                                                                                      |
| <b>Protein Biological Process 3</b> | Autophagy                                                                                                                                                                                                                                                                                                 |
| <b>Sample Types</b>                 | serum, plasma, tissue homogenates, cell lysates                                                                                                                                                                                                                                                           |
| <b>Detection Range</b>              | 28 pg/mL-1800 pg/mL                                                                                                                                                                                                                                                                                       |
| <b>Sensitivity</b>                  | 7 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>                | Cell Biology                                                                                                                                                                                                                                                                                              |
| <b>Gene Names</b>                   | ATG7                                                                                                                                                                                                                                                                                                      |
| <b>Tag Info</b>                     | quantitative                                                                                                                                                                                                                                                                                              |
| <b>Protein Description</b>          | Sandwich                                                                                                                                                                                                                                                                                                  |
| <b>Description</b>                  | This Human ATG7 ELISA Kit was designed for the quantitative measurement of Human ATG7 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 28 pg/mL-1800 pg/mL and the sensitivity is 7 pg/mL.                                                  |
| <b>Target Details</b>               | This gene was identified based on homology to Pichia pastoris GSA7 and Saccharomyces cerevisiae APG7. In the yeast, the protein appears to be required for fusion of peroxisomal and vacuolar membranes. The protein shows homology to the ATP-binding and catalytic sites of the E1 ubiquitin activating |



enzymes.

## 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 human ATG7 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 % | 86         |
|     | Range %   | 82-90      |
| 1:2 | Average % | 101        |
|     | Range %   | 97-104     |
| 1:4 | Average % | 98         |
|     | Range %   | 94-102     |
| 1:8 | Average % | 105        |
|     | Range %   | 101-109    |

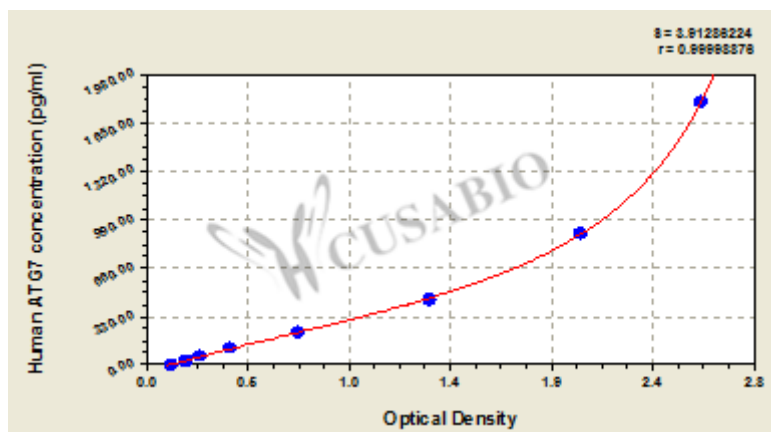
## Recovery

The recovery of human ATG7 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)       | 84                 | 81-89  |
| EDTA plasma (n=4) | 101                | 97-104 |

## 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 |
|-------|-------|-------|---------|-----------|
| 1800  | 2.539 | 2.639 | 2.589   | 2.466     |
| 900   | 2.058 | 2.004 | 2.031   | 1.908     |
| 450   | 1.275 | 1.368 | 1.322   | 1.199     |
| 225   | 0.701 | 0.724 | 0.713   | 0.590     |
| 112.5 | 0.401 | 0.394 | 0.398   | 0.275     |
| 56    | 0.253 | 0.248 | 0.251   | 0.128     |
| 28    | 0.190 | 0.187 | 0.189   | 0.066     |
| 0     | 0.124 | 0.122 | 0.123   | ?         |

## Msds

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{
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    "filename": "MSDS"
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