

# Datasheet for ABIN1028910

# **IGFBP3 ELISA Kit**

1 Image



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#### Overview

| Quantity:                   | 96 tests   |
|-----------------------------|--|
| Target:                     | IGFBP3   |
| Reactivity:                 | Human  |
| Method Type:                | Sandwich ELISA   |
| Detection Range:            | 0.156 ng/mL - 10 ng/mL   |
| Minimum Detection Limit:    | 0.156 ng/mL  |
| Application:                | ELISA  |
| Product Details             |  |
| Purpose:                    | The kit is a sandwich enzyme immunoassay for the in vitro quantitative measurement of IGFBP3 in human serum, plasma, tissue homogenates, cell lysates, cell culture supernates and other biological fluids.  |
| Sample Type:                | Cell Culture Supernatant, Cell Lysate, Plasma, Serum, Tissue Homogenate  |
| Analytical Method:          | Quantitative   |
| Detection Method:           | Colorimetric   |
| Specificity:                | This assay has high sensitivity and excellent specificity for detection of this index.   |
| Cross-Reactivity (Details): | No significant cross-reactivity or interference between this index and analogues was observed.  Note: Limited by current skills and knowledge, it is impossible for us to complete the cross-reactivity detection between this index and all the analogues, therefore, cross reaction may still exist. |
| Sensitivity:                | 0.069 ng/mL  |

#### **Product Details**

#### Components:

- · Pre-coated, ready to use 96-well strip plate
- · Standard (freeze dried)
- · Standard Diluent
- · Detection Reagent A
- · Detection Reagent B
- · Assay Diluent A
- · Assay Diluent B
- TMB
- · Stop Solution
- Wash Buffer (30X)
- Plate sealer for 96 wells
- · Instruction manual

#### Material not included:

- 1. Microplate reader with 450  $\pm$  10nm filter.
- 2. Precision single or multi-channel pipettes and disposable tips.
- 3. Eppendorf Tubes for diluting samples.
- 4. Deionized or distilled water.
- 5. Absorbent paper for blotting the microtiter plate.
- 6. Container for Wash Solution.

#### **Target Details**

| Target:           | IGFBP3  |
|-------------------|---|
| Alternative Name: | IGFBP3 (IGFBP3 Products)  |
| Background:       | Alternative name: BP53, IBP3, Growth Hormone-Dependent Binding Protein, Acid Stable Subunit Of The 140 K IGF Complex  |
| Gene ID:          | 3486  |
| UniProt:          | P17936  |
| Pathways:         | Myometrial Relaxation and Contraction, Regulation of Muscle Cell Differentiation, Skeletal  Muscle Fiber Development, Regulation of Carbohydrate Metabolic Process, Autophagy, Smooth  Muscle Cell Migration, Growth Factor Binding |

### **Application Details**

| Sample Volume: | 100 μL     |
|----------------|------------|
| Assay Time:    | 1 - 4.5 h  |
| Plate:         | Pre-coated |

# **Application Details**

| Protocol:          | 1. Prepare all reagents, samples and standards  |
|--------------------|---|
|                    | 2. Add 100µL standard or sample to each well. Incubate 2 hours at 37°C  |
|                    | 3. Aspirate and add 100µL prepared Detection Reagent A. Incubate 1 hour at 37°C   |
|                    | 4. Aspirate and wash 3 times  |
|                    | 5. Add 100µL prepared Detection Reagent B. Incubate 1 hour at 37°C  |
|                    | 6. Aspirate and wash 5 times  |
|                    | 7. Add 90µL Substrate Solution. Incubate 15-25 minutes at 37°C  |
|                    | 8. Add 50µL Stop Solution. Read at 450nm immediately.   |
| Assay Procedure:   | The microtiter plate provided in this kit has been pre-coated with an antibody specific to the  |
|                    | index. Standards or samples are then added to the appropriate microtiter plate wells with a   |
|                    | biotin-conjugated antibody preparation specific to the index. 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 the index, 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 the index in   |
|                    | the samples is then determined by comparing the O.D. of the samples to the standard curve.  |
| Assay Precision:   | Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level     the index were tested 30 times on an allete respectively.                          |
|                    | <ul> <li>the index were tested 20 times on one plate, respectively.</li> <li>Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level</li> </ul> |
|                    | the index were tested on 3 different plates, 8 replicates in each plate.  |
|                    | • CV(%) = SD/meanX100   |
|                    | • Intra-assay: CV&lt10%   |
|                    | Inter-assay: CV&lt12%   |
| Restrictions:      | For Research Use only   |
| Handling           |   |
| Precaution of Use: | The Stop Solution suggested for use with this kit is an acid solution. Wear eye, hand, face, and  |
|                    | clothing protection when using this material.   |
| Handling Advice:   | The stability of ELISA 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 conditions. Note: To minimize  |
|                    | unnecessary influences on the performance, operation procedures and lab conditions,   |
|                    | especially room temperature, air humidity and incubator temperatures should be strictly   |
|                    | regulated. It is also strongly suggested that the whole assay is performed by the same  |
|                    | experimenter from the beginning to the end.   |

### Handling

| Storage:         | 4 °C,-20 °C  |
|------------------|--|
| Storage Comment: | The Assay Plate, Standard, Detection Reagent A and Detection Reagent B should be stored at -     |
|                  | 20°C upon being received. After receiving the kit , Substrate should be always stored at         |
|                  | 4°C.Other reagents are kept according to the labels on vials. But for long term storage, please  |
|                  | keep the whole kit at -20°C. The unused strips should be kept in a sealed bag with the desiccant |
|                  | provided to minimize exposure to damp air. The test kit may be used throughout the expiration    |
|                  | date of the kit (six months from the date of manufacture). Opened test kits will remain stable   |
|                  | until the expiring date shown, provided it is stored as prescribed above.                        |
| Expiry Date:     | 12 months  |
|                  |  |
| Images           |  |

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**Optical Density** 

#### **ELISA**

Image 1. Typical Standard Curve