

# Datasheet for ABIN5680717

# **IGFBP2 ELISA Kit**



## Overview

96 tests
IGFBP2
total
Human
Sandwich ELISA
0.45 ng/mL - 16 ng/mL
0.45 ng/mL
ELISA
The IGFBP-2 enzyme linked immunosorbent assay (ELISA) kit provides materials for the
quantitative measurement of IGFBP-2 in human serum.
Plasma, Serum
Quantitative
Colorimetric
0.08 ng/mL
0.08 ng/mL  • IGFBP-2 Calibrators A/Sample Diluent
IGFBP-2 Calibrators A/Sample Diluent
<ul> <li>IGFBP-2 Calibrators A/Sample Diluent</li> <li> Cal-140F IGFBP-2 Calibrators B - F</li> </ul>

- IGFBP-2 Biotin Conjugate Concentrate
- IGFBP-2 Streptavidin-Enzyme Conjugate-Ready-to-Use (RTU)
- TMB Chromogen Solution
- · Stopping Solution
- · Wash Concentrate A

### Material not included:

- 1. Microplate absorbance reader capable of absorbance measurement at 45 nm, 405nm and 630 nm.
- 2. Microplate orbital shaker.
- 3. Microplate washer.
- 4. Semi-automated/manual precision pipette to deliver 5-250 μL.
- 5. Vortex mixer.
- 6. Repeater pipette.

## Target Details

Target:	IGFBP2
Alternative Name:	IGFBP-2 (IGFBP2 Products)
Pathways:	Myometrial Relaxation and Contraction, Growth Factor Binding, Activated T Cell Proliferation
Application Details	
Sample Volume:	10 μL
Assay Time:	2.5 h
Plate:	Pre-coated
Reagent Preparation:	<ol> <li>Wash Solution: Dilute wash concentrate 25-fold with deionized water. The wash solution is stable for one month at room temperature when stored in a tightly sealed bottle.</li> <li>IGFBP-2 Antibody-Biotin Conjugate Solution: The IGFBP-2 Antibody-Biotin Conjugate Concentrate should be diluted at a ratio of 1 part conjugate to 50 parts of IGFBP-2 Assay buffer, according to the number of wells used. If an entire plate is to be used pipet exactly 220 µL of the Concentrate in to 11 mL of the Assay buffer.</li> <li>Microtitration Wells: Select the number of coated wells required for the assay. The remaining unused wells should be placed in the resealable pouch with a desiccant. The pouch must be resealed to protect from moisture.</li> </ol>
Sample Collection:	<ul> <li>Serum is the recommended sample type. Sample handling, processing, and storage requirements depend on the brand of blood collection tube that you use. Please reference the manufacturer's instructions for guidance. Each laboratory should determine the acceptability of its own blood collection tubes and serum separation products.</li> </ul>

- Samples must be stored at -20 °C or -80 °C to avoid loss of bioactivity and contamination.
- · Avoid assaying lipemic, hemolyzed or icteric samples.
- · Avoid repeated freezing and thawing of samples. Thaw samples no more than 3 times.
- For shipping, place specimens in leak proof containers in biohazard specimen bags with appropriate specimen identification and test requisition information in the outside pocket of the biohazard specimen bag. Follow DOT and IATA requirements when shipping specimens19.

### Assay Procedure:

Allow all specimens and reagents to reach room temperature ( $23 \pm 2$  °C) and mix thoroughly by gentle inversion before use. Calibrators, controls, and unknowns should be assayed in duplicate. Note: All Male, Female and First Trimester samples should be diluted 1:10 ( $10\mu$ L sample+  $90\mu$ L IGFBP-2 Calibrator A/Sample Diluent). Samples from Second Trimester onwards should be run neat. Do not dilute the calibrators and controls.

- 1. Allow the calibrators to reach the room temperature (23  $\pm$  2 °C) & mix well by gentle vortex.
- 2. Label the microtitration strips to be used.
- 3. Pipette 25 µL of the Calibrator, Controls and Unknowns to the appropriate wells.
- 4. Add 100 µL of the IGFBP-2 Assay Buffer to each well using a repeater pipette.
- 5. Incubate the plate, shaking at a fast speed (600-800 rpm) on an orbital microplate shaker, for 60 minutes at room temperature ( $23 \pm 2$  °C).
- 6. With 30-40 minutes remaining of incubation time, prepare the IGFBP-2 Antibody-Biotin Conjugate Solution by diluting the IGFBP-2 Biotin Conjugate Concentrate in IGFBP-2 Assay buffer as described under the Preparation of the Reagents section of this insert.
- 7. Aspirate and wash each strip 5 times with Wash Solution (350  $\mu$ L/per well) using an automatic microplate washer.
- 8. Add 100 µL of the IGFBP-2 Biotin Conjugate solution to each well using a repeater pipette.
- 9. Incubate the plate, shaking at a fast speed (600-800 rpm) on an orbital microplate shaker, for 60 minutes at room temperature ( $23 \pm 2$  °C).
- 10. Aspirate and wash each strip 5 times with the Wash Solution (350  $\mu$ L/per well) using an automatic microplate washer.
- 11. Add 100 µL of the Streptavidin-Enzyme Conjugate-RTU to each well using a repeater pipette.
- 12. Incubate the plate, shaking at a fast speed (600-800 rpm) on an orbital microplate shaker, for 30 minutes at room temperature ( $23 \pm 2$  °C).
- 13. Aspirate and wash each strip 5 times with the Wash Solution (350  $\mu$ L/per well) using an automatic microplate washer.
- 14. Add 100  $\mu$ L of the TMB chromogen solution to each well using a precision pipette. Avoid exposure to direct sunlight.
- 15. Incubate the wells, shaking at 600-800 rpm on an orbital microplate shaker, for 8 -10 min at room temperature (23  $\pm$  2 °C). NOTE: Visually monitor the color development to optimize the incubation time.
- 16. Add 100 µL of the stopping solution to each well using a precision pipette. Read the absorbance of the solution in the wells within 20 minutes, using a microplate reader set to 450 nm. NOTE: While reading the absorbance of the microtitration well, it is necessary to

program the zero calibrator as a ""Blank"".

### Calculation of Results:

NOTE: The results in this package insert were calculated by plotting the data on a log vs. log scale using a cubic regression curve-fit. Other data reduction methods may give slightly different results.

- 1. Calculate the mean optical density (OD) for each calibrator, Control, or Unknown.
- 2. Plot the log of the mean OD readings for each of the Calibrators along the y-axis versus log of the IGFBP-2 concentrations in ng/mL along the x-axis, using a cubic regression curve-fit.
- 3. Determine the IGFBP-2 concentrations of the Controls and unknowns from the calibration curve by matching their mean OD readings with the corresponding IGFBP-2 concentrations.
- 4. Any sample reading higher than the highest Calibrator should be appropriately diluted with the 0 ng/mL (CAL A / Sample Diluent) and re-assayed.
- 5. Any sample reading lower than the analytical sensitivity should be reported as such.
- 6. Multiply the value by a dilution factor.

Restrictions:

For Research Use only

### Handling

Precaution of Use:

The following precautions should be observed: a) Follow good laboratory practice. b) Use personal protective equipment. Wear lab coats and disposable gloves when handling immunoassay materials. c) Handle and dispose of all reagents and material in compliance with applicable regulations WARNING: Potential Biohazardous Material This reagent may contain some human source material (e.g. serum) or materials used in conjunction with human source materials. Handle all reagents and patient samples at a Biosafety Level 2, as recommended for any potentially infectious human material in the Centers for Disease Control/National Institutes of Health manual "Biosafety in Microbiological and Biomedical Laboratories," 5th Edition, 2007.11 WARNING: Potential Chemical Hazard Some reagents in this kit contain Pro-Clean 400 and Sodium azide 12 as a preservative. Pro-Clean 400 and Sodium azide in concentrated amounts are irritants to skin and mucous membranes. For further information regarding hazardous substances in the kit, please refer to the MSDS.

Storage:

4°C