

## IGFBP2

### Human IGFBP-2 ELISA Kit

**Catalog No.** CKH149 **Quantity:** 1 x 96 tests

**Description:** **Introduction:** IGFBPs (Insulin-like growth factor binding proteins) are found in various body fluids such as blood serum and amniotic fluid. They are synthesized in the liver and are also produced by various tumor cell lines and cell types. IGFBP-2 is observed mainly in brain, showing complex patterns of gene expression during postnatal brain development. Elevated levels of IGFBP-2 have been observed in the serum of prostate cancer patients. IGFBP-2 expression does not depend on Growth hormone.

**Assay Principle:** The Human IGFBP-2 ELISA (Enzyme-Linked Immunosorbent Assay) kit is an in vitro assay for the quantitative measurement of Human IGFBP-2 in serum, plasma, cell culture supernatants, and urine. This assay employs an antibody specific for human IGFBP-2 coated on a 96-well plate. Standards and samples are pipetted into the wells and IGFBP-2 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human IGFBP-2 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted into the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of IGFBP-2 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

**Gene ID:** 3485

**Sensitivity:** The minimum detectable dose of IGFBP-2 is typically less than 20 pg/ml.

**Assay Range:** 8.23 - 6,000 pg/ml

**Reproducibility:** Intra-Assay: CV<10%; Inter-Assay: CV<12%

**Samples:** Serum, plasma, cell culture supernatants, and urine.

**Recovery:** Recovery was determined by spiking various levels of human IGFBP-2 into human serum, plasma and cell culture media.

Serum: Mean recovery of 95.77% (range 84-103%).

Plasma: Mean recovery of 97.59% (range 85-104%).

Cell culture media: Mean recovery of 100.25% (range 86-105%).



**Reagents Included:**

1. IGFBP-2 Microplate (Item A): 96 wells (12 strips x 8 wells) coated with anti-Human IGFBP-2.
2. Wash Buffer Concentrate (20x) (Item B): 25 ml of 20x concentrated solution.
3. Standards (Item C): 2 vials, Recombinant Human IGFBP-2.
4. Assay Diluent A (Item D): 30 ml with 0.09% sodium azide as preservative. For Standard/Sample (serum/plasma) diluent.
5. Assay Diluent B (Item E): 15 ml of 5x concentrated buffer. For Standard/Sample (cell culture medium/urine) diluent.
6. Detection Antibody IGFBP-2 (Item F): 2 vial of biotinylated anti-Human IGFBP-2 (each vial is enough to assay half a microplate).
7. HRP-Streptavidin Concentrate (Item G): 8  $\mu$ l of 15,000x concentrated HRP-conjugated streptavidin.
8. TMB One-Step Substrate Reagent (Item H): 12 ml of 3,3',5,5'- tetramethylbenzidine (TMB) in buffered solution.
9. Stop Solution (Item I): 8 ml of 2 M sulfuric acid.

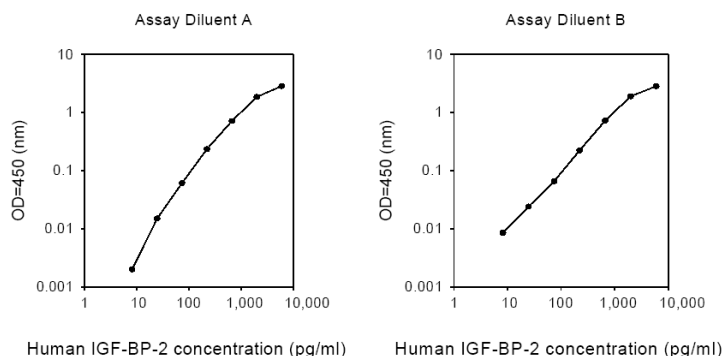
**Cross-Reactivity:**

This ELISA kit shows no cross-reactivity with any of the cytokines tested (human BDNF, BLC, ENA-78, FGF-4, IL-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-5, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12 p70, IL-12 p40, IL-13, IL-15, IL-309, IP-10, G-CSF, GM-CSF, IFN- $\gamma$ , IGFBP-1, IGFBP-3, IGFBP-4, Leptin (OB), MCP-1, MCP-2, MCP-3, MDC, MIP-1 $\alpha$ , MIP-1  $\beta$ , MIP-1 $\delta$ , PARC, PDGF, RANTES, SCF, TARC, TGF- $\beta$ , TIMP-1, TIMP-2, TNF- $\alpha$ , TNF- $\beta$ , TPO, VEGF).

**Storage & Stability:**

May be stored for 6 months at 2-4°C. After reconstitution, store Standard (recombinant protein) at -80°C. Opened Microplate Wells and reagents may be stored for 1 month at 2-4°C. Return unused wells to the pouch containing desiccant pack and reseal along entire edge of zip-seal. The kit can be used within 1 year if the whole kit is stored at -20°C. **C. Avoid repeated freeze-thaw cycles.**

The standard curves are for demonstration purposes only.  
A standard curve must be run with each assay.



**NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.**



**Cell Sciences®**  
480 Neponset Street  
Bldg 12A  
Canton, MA 02021

Toll Free: 888-769-1246  
Phone: 781-828-0610  
Fax: 781-828-0542

E-mail: [info@cellsciences.com](mailto:info@cellsciences.com)  
Website: [www.cellsciences.com](http://www.cellsciences.com)