● **Total IGFBP-4 (Total and Intact)** 

Enzyme-Linked Immunoassay Kit



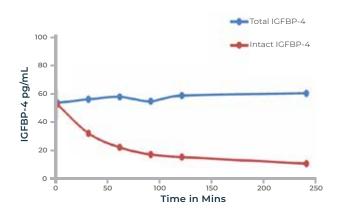
Insulin-like growth factor-binding protein-4 is a member of the insulin-like growth factor binding protein (IGFBP) family and encodes a protein with an IGFBP domain and a thyroglobulin type-I domain. The cDNA for human IGFBP-4 encodes a 258-residue protein that is processed, by removal of the signal sequence, to a mature protein of 237 residues (25.6 kDa) with a single asparagine-linked glycosylation site. Although various cell types when in culture secrete both glycosylated (28-29 kDa) and nonglycosylated (24-25 kDa) forms of IGFBP-4, the nonglycosylated is typically the most abundant in normal human blood.

The ratio of Total (AL-126) to Intact IGFBP-4 (AL-128) concentration measured in individual subject over time will help normalizes the IGFBP-4 variability between subjects and also increase the detection rate of increased PAPP-A activity in MI subjects. The immunoassay methods designed for the measurement of total and Intact IGFBP-4 in patient samples could be of practical value for the diagnosis or prediction of various pathologies including ACS and cancer.

# **ANSH LABS ADVANTAGES**

### Accurate

IGFBP-4 was incubated with active PAPP-A for up to six hours. Reaction mixture were collected and measured in Intact and Total IGFBP-4. ELISA assay at six different time points are shown. No significant changes were observed in the Total IGFBP-4 concentration.



Simple extraction procedure Three-step sandwich assay with no sample preparation.

The total IGFBP-4 is sensitive to 4.73 ng/mL with an analytical measurable range of 50-702 ng/mL. The intact IGFBP-4 is sensitive to 0.669 ng/mL with an nalytical measurable range of 1.7-75 ng/mL

#### Long shelf-life

24 months from the date of manufacture; minimizing assay lot changes for long term studies.

## Specific

The Total IGFBP-4 assay's capture and detection antibodies bind to the C terminal of the IGFBP-4 molecule. The Intact IGFBP-4 assay's antibody pair does not detect fragments. The capture monoclonal antibody binds to the N terminal whereas detection antibody binds to C terminal of the IGFBP-4 molecule. Closely related analytes when tested in the assay at 1000 ng/mL did not show any detectable cross reactivity.

Sample Name	% Cross-reactivity
IGF-I	ND
IGFBP-2	ND
IGFBP-3	ND
IGFBP-3/IGF-I Complex	ND
IGFBP-5	ND
Rat IGF-I	ND
IGE-II	ND



# **Total IGFBP-4**

Acute Coronary Syndrome

Aging and Longevity Studies

Growth Hormone Deficiency

# **Product Listing**

#### GFBP-4 is a useful research tool for studies related to:

Diabetes

Hypertension

- **O**steoarthritis
- Cardiomyopathy

### **ELISA 96 Wells**

#### GFBP-4 (Total)

Method Q	Quantitative 3-step sandwich type immunoassay Total 2.5 hour incubation at room temperature	
Incubation Time		
Approximate Dynamic Range 6	points, 50-702 ng/mL	
Sensitivity 4.	.735 ng/mL	
Sample Size / Type 2	5 μL / Serum	
Shelf-life 24	4 months	
Catalog Number A	L-126	

#### GFBP-4 (Intact)

Method	Quantitative 3-step sandwich type immunoassay	
Incubation Time	Total 2.5 hour incubation at room temperature	
Approximate Dynamic Range	6 points, 1.5-96.16 ng/mL	
Sensitivity	0.669 ng/mL	
Sample Size / Type	25 μL / Serum	
Shelf-life	24 months	
Catalog Number	AL-128	

### **Related Assays**

Stanniocalcin 2	96-Well ELISA	AL-143
PAPP-A2	96-Well ELISA	AL-109
IGF-I Free	96-Well ELISA	AL-122
IGF-I Total	96-Well ELISA	AL-121 [FDA, CE]
IGF-II	96-Well ELISA	AL-131
IGFBP-3 Intact	96-Well ELISA	AL-149
IGFBP-3 Total	96-Well ELISA	AL-120
IGFBP-5	96-Well ELISA	AL-127

\*Unless otherwise stated here, in our catalog, or other product documentation,

these kits are intended for research use only and not for in vitro diagnostic purposes or therapeutic uses.



#### Reproductive Function

Activin A [CE] Activin B Activin AB AFP AMH [CE] AMH, Dried Blood Spot [CE] AMH (PCOCheck<sup>™</sup>) [CE] picoAMH (MenoCheck®) [FDA, CE1 BMP-15 Estriol [FDA, CE] Follistatin Follistatin Like-3 FSH FSH, Dried Blood Spot GDF-9 GDF-9/BMP-15 Complex GDF-15, Total GDF-15, H-Specific Inhibin, Total Inhibin A [FDA, CE] picolnhibin A Inhibin A (OMQCheck<sup>™</sup>) Inhibin B [CE] Inhibin B, Ultra-Sensitive [CE] LH LH, Dried Blood Spot PAPP-A [CE] PAPP-A2 [CE] picoPAPP-A [CE] PLGF [CE] Prolactin [FDA, CE] Prolactin, Dried Blood Spot [CE]

#### Specialty Controls

AnshCheck AMH Tri-Level Controls [FDA, CE]

AnshCheck Inhibin B Tri-Level Controls

AnshCheck Maternal Screening Bi-Level Controls [FDA, CE]

\*\*Unless stated otherwise, products are for research use only.

### Metabolism

C-Peptide of Insulin GIP, Intact GIP, Total Glicentin GLP-1 GLP-2 Glucagon [FDA, CE] Major Proglucagon Fragment Oxyntomodulin Proglucagon

#### Growth Factors

IGF-I, Free IGF-I, Total [FDA, CE] IGF-II IGFBP-2 IGFBP-3, Intact IGFBP-3, Total IGFBP-4, Intact IGFBP-4, Total IGFBP-5 picolL-6 Stanniocalcin 2

#### Species Specific Assays

Activin B: Mouse, Rat

AMH: Bovine, Canine, Equine, Feline, Mouse, Ovine, Porcine, Primate, Rat

GDF-15: Bovine

IGF-I, Free: Mouse, Rat

IGF-I, Total: Mouse, Rat

IGFBP-4, Intact : Mouse, Rat IGFBP-4, Total: Mouse, Rat

Inhibin A: Canine, Equine, Rodent

Inhibin B: Canine, Equine, Mouse

Oxyntomodulin: Mouse, Rat PAPP-A: Mouse

Neuronal Disorders

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Ansh Labs is ISO certified for the design, development, manufacturing, services and distribution of reagents/ immunoassay kits for research and in vitro diagnostic applications.