IGFBP-3 (Total and Intact)

Enzyme-Linked Immunoassay Kit

Introduction:

IGFs in circulation are mainly bound by IGFBP-3. Proteolysis of IGFBP-3 is necessary to release IGFs, which in the unbound (bioactive) state interact with their receptors to regulate cell growth and differentiation pathways. Intact and truncated IGFBP-3 may have distinct biological and clinical relevance. It has been reported that intact and total IGFBP-3 show different associations with breast cancer risk factors. Elevated intact IGFBP-3 levels in circulation were associated with increased risk of prostate cancer-specific death and intact IGFBP-3 levels were found to be significantly low in patients with inflammatory bowel disease. An accurate assessment of intact versus total IGFBP-3 could be informative in understanding IGFBP-3 regulation and function in various physiological and disease states.

The Ansh Labs Total and intact IGFBP-3 assay uses an acidification and neutralization method to dissociate IGFBP-3 from all the binding subunits. Total IGFBP-3 levels are quantified in the extracted samples using a highly sensitive and specific total IGFBP-3 ELISA.

ANSH LABS ADVANTAGES

Accurate

The Calibrator F and two serum samples were serially diluted in Calibrator A. The diluted serum samples were treated as mentioned in the sample preparation section and assayed. The % recovery is shown in the table.

Sample	Dilution Factor	Expected Conc. (ng/mL)	Observed Conc. (ng/mL)	% Recovery
1	Neat	169.728	NA	NA
	1:2	84.864	94.778	112
	1:4	42.432	47.687	112
	1:8	21.216	24.789	117
2	Neat	127.916	NA	NA
	1:2	63.958	62.819	98
	1:4	31.979	32.523	102
	1:8	15.990	14.967	94
Calibrator F	Neat	216.00	NA	NA
	1:2	108.00	102.737	95
	1:4	54.00	49.972	93
	1:8	27.00	24.338	90
	1:16	13.50	12.335	91
	1:32	6.75	6.143	91

Simple extraction procedure

Acidification and neutralization method to dissociate IGFBP-3 from the binding subunits.

The Total IGFBP-3 assay is sensitive to 0.3 ng/mL with an analytical measurable range of 7.5-216 ng/mL. The Intact IGFBP-3 assay is sensitive to 1.37 ng/mL with an analytical measurable range of 1.7-75 ng/mL

Kit includes all reagents needed to run a 96-well plate, shipped at ambient temperatures and stored at 2-8°C

No need to buy or make additional reagents.

Long shelf-life

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

Specific

The monoclonal antibody pair used in the assay detects IGFBP-3. Other related analytes at 1000 ng/mL did not show any cross-reaction.

Sample Name	% Cross-reactivity
IGF-I	ND
IGFBP-2	ND
IGFBP-4	ND
IGFBP-5	ND
Rat IGF-I	ND
IGF-II	ND

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IGFBP-3

Product Listing

IGFBP-3 is a useful research tool for studies related to:

- Diabetes
- Oncology
- Hypertension
- Osteoarthritis
- Cardiomyopathy
- Diminished longevity
- Acute Coronary Syndrome

ELISA 96 Wells

IGFBP-3 (Total)

Method	Quantitative 2-step sandwich type immunoassay
Incubation Time	Total 1.5 hour incubation at room temperature
Approximate Dynamic Range	6 points, 7.5-216 ng/mL
Sensitivity	0.3 ng/mL
Sample Size / Type	10 µL / Serum
Shelf-life	24 months
Catalog Number	AL-120

IGFBP-3 (Intact)

Method	Quantitative 2-step sandwich type immunoassay
Incubation Time	Total 1.5 hour incubation at room temperature
Approximate Dynamic Range	6 points, 1.7-75 ng/mL
Sensitivity	1.37 ng/mL
Sample Size / Type	10 µL / Serum
Shelf-life	24 months
Catalog Number	AL-149

Related Assays

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-4	96-Well ELISA	AL-126
IGFBP-4 Intact	96-Well ELISA	AL-128
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.

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Reproductive Function

- Activin A [CE]
- Activin B
- Activin AB
- AFP
- AMH [CE]
- AMH, Dried Blood Spot [CE]
- AMH (PCOCheck™) [CE]
- picoAMH (MenoCheck®) [FDA, CE]
- 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]
- picoInhibin A
- Inhibin A (OMQCheck™)
- 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]

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
- picoIL-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

- MBP

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

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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.

ISO 13485:2016