

IGFBP-3 (Insulin-Like Growth Factor Binding Protein-3)

Analyte: Insulin-like Growth Factor Binding Protein-3

Specimen Type: Serum, Inquire for additional option(s)

Optimum Volume: 0.5 mL

Stability:

2-8 Degrees C	-20 Degrees C	-70 Degrees C
3 days	1 year	9 years

Reporting Units: ug/mL

Method: Chemiluminescence

Biological or Clinical Significance:

Insulin-like growth factors (IGF-1, IGF-II) are a family of peptides involved in the regulation of cell growth, the actions of which are mediated by binding to the insulin-like growth factor binding proteins. Six binding proteins (IGFBP-1 through IGFBP-6) have been described. IGFBP-3 is the most predominant of these. IGFBP-3 is a 264-amino acid peptide, which forms a 150kD glycoprotein complex consisting of IGFBP-3 itself and an IGF molecule. Approximately 95% of IGF-1 and IGF-II are bound to IGFBP-3, which makes this protein the major carrier of the insulin-like growth factors in circulation. The function of the binding protein is to extend the half-life of the growth factors in the circulation, to several hours.

IGFBP-3 is used as an aid in the evaluation of growth disorders. It is growth hormone (GH) dependent and therefore useful in the evaluation of GH secretion.

Principle of Test Method:

The IGFBP-3 assay is an automated enzymic chemiluminescent method.