

# Canine IGFBP1 / IGFBP-1 Protein (His Tag)



Sino Biological  
Biological Solution Specialist

Catalog Number: 70254-D08H

## General Information

### Gene Name Synonym:

IGFBP1

### Protein Construction:

A DNA sequence encoding the canine IGFBP1 (XP\_005629556.1) (Met1-Ser249) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Canine

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE.

### Endotoxin:

< 1.0 EU per µg protein as determined by the LAL method.

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Thr 26

### Molecular Mass:

The recombinant canine IGFBP1 consists 235 amino acids and predicts a molecular mass of 26 kDa.

### Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

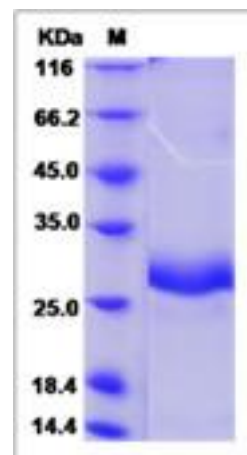
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

IGFBP1, also known as IGFBP-1 and insulin-like growth factor-binding protein 1, is a member of the insulin-like growth factor binding protein family. IGF binding proteins (IGFBPs) are proteins of 24 to 45 kDa. All six IGFBPs share 50% homology with each other and have binding affinities for IGF-I and IGF-II at the same order of magnitude as the ligands have for the IGF-IR. IGF-binding proteins prolong the half-life of the IGFs and have been shown to either inhibit or stimulate the growth promoting effects of the IGFs on cell culture. They alter the interaction of IGFs with their cell surface receptors. IGFBP1 has an IGFBP domain and a thyroglobulin type-I domain. It binds both insulin-like growth factors (IGFs) I and II and circulates in the plasma. Binding of this protein prolongs the half-life of the IGFs and alters their interaction with cell surface receptors.

## References

1.Wood AW, *et al.* (2005) Insulin-like growth factor signaling in fish. *Int Rev Cytol.* 243:215-85. 2.Firth SM, *et al.* (2003) Cellular actions of the insulin-like growth factor binding proteins. *Endocr Rev.* 23 (6):824-54. 3.Ferry RJ, *et al.* (1999) Insulin-like growth factor binding proteins: new proteins, new functions. *Horm Res.* 51(2):53-67.

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