# **GroPep Bioreagents**



## Rat IGFBP-5

#### Description

Rat insulin-like growth factor binding protein-5 (IGFBP-5) is a 252 amino acid protein which preferentially binds IGF-II compared to IGF-I. It is highly conserved with a single amino acid difference [Asp<sup>187</sup>] compared to mouse IGFBP-5 [Glu<sup>187</sup>] and approximately 97% sequence homology to human IGFBP-5. It is functionally similar to human IGFBP-5 and inhibits the effects of IGF peptides. It binds to extra-cellular matrix proteins which protect it from proteolysis and modify its biological functions.

#### This product has a 5 amino-acid N-terminal extension (GPLGS).

References Shimasaki S et al (1991) Journal of Biological Chemistry 266, 10646-10653

Zhu X et al (1993) Biochemical and Biophysical Research Communications

**190**, 1045-1052

Allan GJ et al (2002) Endocrinology 143, 4310-4319

Source: Expressed in an Origami™ B cell expression system and purified by

affinity chromatography.

**Molecular Weight:** Non-glycosylated mouse IGFBP-5 is 28.5 kDa

**Purity:** >90 % (by SDS PAGE)

**Biological Activity:** Binds IGF-I in Western ligand blot.

Binding affinity for IGF-I - 0.2nM (Biosensor)

**Endotoxin:**  $< 0.1 EU/\mu g$ 

**Appearance:** White powder freeze-dried from 0.1M acetic acid and stored under

nitrogen at a slight vacuum.

Storage/Stability: At least 2 years at 2-4°C (as a freeze dried product).

**Reconstitution:** Handling of GroPep IGF binding proteins 1-6

**Detection:** Procedure for Western Ligand blotting using iodinated IGF-I or IGF-II

Procedure for Western Ligand blotting using biotinylated IGF-I or

IGF-II

#### **Product Codes and Pricing**

**Rat IGFBP-5 BP5CU010** 10 µg

**Related Products: Human IGFBP-5** 

Mouse IGFBP-5

IGFBP-5 polyclonal antibody

### \*NOT FOR USE IN HUMANS\*\*

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