

## **Product datasheet for TP727100**

## OriGene Technologies, Inc.

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## **Igfbp5 Mouse Recombinant Protein**

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant Mouse Insulin-like Growth Factor-Binding Protein 5/IGFBP5 (C-6His)

Species: Mouse

**Expression cDNA Clone** 

or AA Sequence:

Leu20-Glu271

Tag: C-His

**Buffer:** Lyophilized from a 0.2 um filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

**Note:** Recombinant Mouse Insulin-like growth factor-binding protein 5 is produced by our

Mammalian expression system and the target gene encoding Leu20-Glu271 is expressed with

a 6His tag at the C-terminus.

**Stability:** 12 months from date of despatch

Locus ID: 16011
UniProt ID: <u>Q07079</u>

Summary: Mouse Insulin-like growth factor-binding protein 5(IGFBP-5) belongs to the superfamily of

insulin-like growth factor (IGF) binding proteins. It contains 1 IGFBP N-terminal domain and 1 thyroglobulin type-1 domain. Mouse IGFBP-5 shows 97% aa sequence identity with those of human and rat IGFBP-5. It is expressed mostly in kidney, uterus and gastrocnemius muscle. It also expressed by fibroblasts, myoblasts and osteoblasts, making it the predominant IGFBP found in bone extracts. IGFBP-5 has a strong affinity for hydroxyapatite, allowing it to bind to bone cells. When bound to extracelluar matrix, IGFBP-5 is protected from proteolysis and potentiates IGF activity, but when it is soluble, IGFBP-5 is cleaved to a biologically inactive 21 kDa fragment. 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.

