



Recombinant Protein Technical Manual
Recombinant Mouse IGFBP-5/IGFBP5 Protein (His
Tag)
RPES1353

Product Data:

Product SKU: RPES1353

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q07079

Protein Information:

Molecular Mass: 29.3 kDa

AP Molecular Mass: 38 kDa

Tag: C-6His

Bio-activity:

Purity: > 90 % as determined by SDS-PAGE

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

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: BP-5; IGFBP-5; IGF-binding protein 5; Insulin-like growth factor-binding protein 5;

Immunogen Information:

Sequence: Leu20-Glu271

Background:

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 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 extracellular 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.