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

Catalog Number: PKSM041058

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

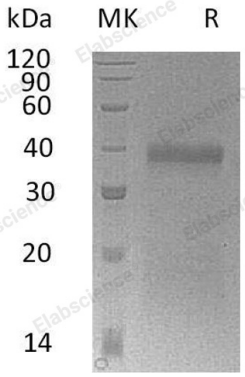
Description

Species	Mouse
Mol_Mass	29.3 kDa
Accession	Q07079
Bio-activity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

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-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.

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