

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

Catalog Number: PKSM041058

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

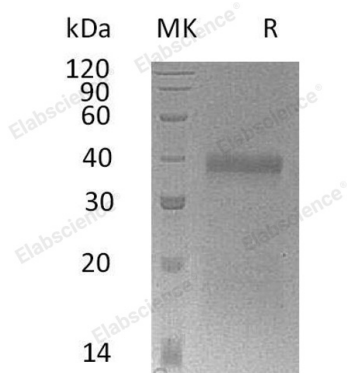
Description

Species	Mouse
Source	HEK293 Cells-derived Mouse IGFBP-5/IGFBP5 protein Leu20-Glu271, with an C-terminal His
Calculated MW	29.3 kDa
Observed MW	38 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 °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, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Reconstitution	Please refer to the specific buffer information in the printed manual.

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 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.