Recombinant Mouse IGF-I Protein



RPCB1305

Product Information

Product SKU: RPCB1305 **Gene ID**: 16000 **Size**: 10μg

Tag: N-hFc Reactivity: Mouse

Additional Information

Expression Host: - **Swissprot**: P05017

Purity: > 98% by SDS-PAGE.

Protein Information

Background:

Insulin-like growth factor I, also known as somatomedin C, is the dominant effector of growth hormone and is structurally homologous to proinsulin. Mouse IGF-I/IGF-1 is synthesized as two precursor isoforms with alternate N- and C-terminal propeptides. These isoforms are differentially expressed by various tissues. The 7.6 kDa mature IGF-I/IGF-1 is identical between isoforms and is generated by proteolytic removal of the N- and C-terminal regions. Mature mouse IGF-I/IGF-1 shares 94% and 99% aa sequence identity with human and rat IGF-I/IGF-1, respectively, and exhibits cross-species activity. It shares 60% aa sequence identity with mature mouse IGF-II/IGF-2. Circulating IGF-I/IGF-1 is produced by hepatocytes, while local IGF-I is produced by many other tissues in which it has paracrine effects. IGF-I induces the proliferation, migration, and differentiation of a wide variety of cell types during development and postnatally. IGF-I regulates glucose and fatty acid metabolism, steroid hormone activity, and cartilage and bone metabolism. It plays an important role in muscle regeneration and tumor progression. IGF-I binds IGF-I R, IGF-II R, and the insulin receptor, although its effects are mediated primarily by IGF-I R. IGF-I association with IGF binding proteins increases its plasma half-life and modulates its interactions with receptors.

Protein Description: High quality, high purity and low endotoxin recombinant Recombinant Mouse IGF-I

Protein, tested reactivity in HEK293 cells and has been validated in SDS-PAGE.100%

guaranteed.

Endotoxin: <0.01EU/μg of the protein by LAL method.

Formulation: Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

Storage: Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the

date of receipt.After reconstitution, the protein solution is stable at -20°C for 3

months, at 2-8°C for up to 1 week.