Product Data Sheet

IGFBP-6 Protein, Rat (HEK293, His)

Cat. No.: HY-P73905

Synonyms: Insulin-like growth factor-binding protein 6; IBP-6; IGFBP-6; IBP6

Species: **HEK293** Source:

P35572/NP_037236.1 (A26-G226) Accession:

Gene ID: 25641

Molecular Weight: Approximately 25-30 kDa due to the glycosylation

PROPERTIES

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$\Lambda \Lambda$	Sec	IIIΔN	60

ADGCAETGGC ALAGCPGCGP GVOEEDAGSP FRREGQPCGV YIPKCAPGLQ CQPRENEETP LRALLIGQGR CQRARGPSEE TTKESKPHGG ASRPRDRDRQ KNPRTSAAPI RPSPVQDGEM GPCRRHLDSV LQQLQTEVFR GGANGLYVPN CDLRGFYRKQ QCRSSQGNRR GPCWCVDPMG QPLPVSPDGQ GSSQCSARSS

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Biological Activity

Measured by its ability to inhibit the biological activity of IGF-I on MCF 7 human breast cancer cells. The ED₅₀ for this effect is 0.1026 μg/mL, corresponding to a specific activity is 9746.5887 U/mg.

Appearance

Lyophilized powder.

Formulation

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconsititution

It is not recommended to reconstitute to a concentration less than $100 \, \mu g/mL$ in ddH_2O . For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

IGFBP-6 protein assumes a crucial role in modulating the activity of insulin-like growth factors (IGFs) by extending their halflife. Demonstrating a dual regulatory capacity in cell culture, IGFBP-6 can either inhibit or stimulate the growth-promoting effects of IGFs, reflecting its versatile influence on cellular processes. Beyond its impact on IGFs, IGFBP-6 actively

participates in cellular signaling by activating the MAPK pathway and promoting cell migration. Notably, it interacts with PHB2 through its C-terminal domain, emphasizing its involvement in intricate protein-protein interactions. These diverse functions highlight the multifaceted role of IGFBP-6 in orchestrating cellular responses associated with growth regulation, signaling, and migration.

Caution: Product has not been fully validated for medical applications. For research use only.

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