

Rev03 DATASHEET

Update: Dec,14,2021

IGF-BP-4, His, Human

Cat. No.: Z03176

Product Introduction

Species	Human	
Protein Construction	IGF-BP-4 (Asp22-Glu258) Accession # P22692 Poly-His	
	N-term C-term	
Purity	> 95% as analyzed by SDS-PAGE	
Endotoxin Level	$< 0.2 \; EU/\mu g$ of protein by gel clotting method	
Biological Activity	$\rm ED_{50}{<}50.0$ ng/ml, measured in a bioassay using FDC-P1 cells in the presence of 15.0 ng/ml human IGF-II.	
Expression System	HEK 293	
Apparent Molecular Weight	30~35 kDa, on SDS-PAGE under reducing conditions.	
Formulation	Lyophilized after extensive dialysis against PBS.	
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH ₂ O or PBS up to 100 μ g/ml.	
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.	

Background

Target Background: Insulin-like growth factor-binding protein 4 (IGF-BP-4), also known as IBP-4, is a secreted glycoprotein belonging to the IGFBP family. IGF-BP-4 is produced by osteoblasts, epidermis, ovarian follicles and other tissues. It binds both insulin-like growth factor (IGF) I and II, and it circulates in the plasma in both glycosylated and non-glycosylated forms. IGF-BP-4 prolongs the half-life of the IGFs and has been shown to inhibit or stimulate the growth-promoting effects of the IGFs. Pregnancy Associated Plasma Protein A (PAPP-A) proteolytically cleaves IGF-BP-4 and reduces its affinity to bind IGFs, and thus serves as an important regulator of IGF-BP-4 function.

Synonyms: Insulin-like Growth Factor-Binding Protein 4; IBP-4; HT29-IGF-BP; colon cancer cell growth inhibitor



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