

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant IGF-BP-4, His, Human

Catalog Number: BK0309-1mg

Source: HEK 293

Quantity: 1mg

Description:

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.

Molecular Weight:

30-35 kDa, observed by reducing SDS-PAGE.

Purity:

> 95% as analyzed by SDS-PAGE.

Biological Activity:

ED50 < 50 ng/ml, measured in a bioassay using FDC-P1 cells in the presence of 15ng/ml human IGF-II.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized after extensive dialysis against PBS.

AA Sequence:

DEAIHCPPCSEEEK-
LARCRPPVVGCEELVREPGCGCCATCALGLGMP-
CGVYTPRCGSLRCYPPRGVEKPLHTLM-
HGQGVCMELAEIEAIQESLQPSDK-
DEGDHPNNSFSPCSAHDRRCLQKHFA-
KIRDRSTSGGKMKVNGAPREDARPVPQG-
SCQSELHRALERLAASQSRTHEDLYIPIP-
NCDRNGNFHPKQCHPALDGQRGKCWCVDRKTG
VKLPGGLEPKGELDCHQLADSFREHHHHHH

Endotoxin:

< 0.2 EU/μg, determined by LAL method.

Reconstitution:

Reconstituted in ddH₂O or PBS at 100 μg/ml.

Storage:

Lyophilized recombinant human IGF-BP-4 remains stable up to 6 months at -80 °C from date of receipt. Upon reconstitution, human IGF-BP-4, His should be stable up to 1 week at 4 °C or up to 2 months at -20 °C.

Usage:

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