

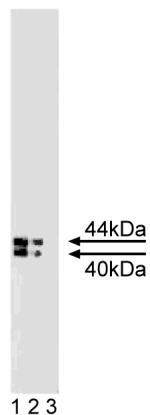
Technical Data Sheet

Purified Mouse Anti-Human IGFBP-3**Product Information**

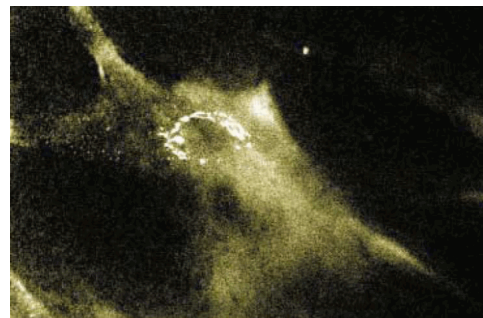
Material Number:	611504
Alternate Name:	IGF-Binding Protein-3
Size:	50 µg
Concentration:	250 µg/ml
Clone:	4/IGFBP-3
Immunogen:	Human IGFBP-3 aa. 101-210
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human
Target MW:	40 & 44 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Insulin-like growth factors (IGF) I and II are peptide hormones that regulate cellular proliferation and differentiation. Most circulating IGFs exist in 130-150 kDa ternary complexes containing IGF-Binding Protein-3 (IGFBP-3) and an 85 kDa glycoprotein, the acid-labile subunit (ALS). IGFBP-3 is one of six IGFBPs that, by binding IGF peptides, prolong their half life and maintain the IGF reservoir. IGFBP-3 is found in body fluids as multiple 40-50 kDa forms as a result of differential glycosylation. The expression of IGFBP-3 in many tissues suggests that it locally modulates the autocrine/paracrine action of IGF peptides. IGFBP-3 binding to fibrinogen may be important for wound healing, since this concentrates IGF-I at wound sites and lowers the affinity of IGF-I for IGFBP-3. In addition, retinoic acid-induced IGFBP-3 expression inhibits the growth promoting effects of IGF-I in breast cancer cells. This may link the retinoid and IGF systems in cell growth regulation and explain how the loss of retinoic acid receptor β leads to breast cancer progression. Thus, IGFBP-3 maintenance and regulation of IGF activity in various tissues may have diverse physiological roles.



Western blot analysis of IGFBP-3 on a human plasma lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-human IGFBP-3 antibody.



Immunofluorescence staining of human fibroblasts.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20° C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Campbell PG, Durham SK, Hayes JD, Suwanichkul A, Powell DR. Insulin-like growth factor-binding protein-3 binds fibrinogen and fibrin. *J Biol Chem.* 1999; 274(42):30215-30221.(Biology)

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Janosi JB, Firth SM, Bond JJ, Baxter RC, Delhanty PJ. N-Linked glycosylation and sialylation of the acid-labile subunit. Role in complex formation with insulin-like growth factor (IGF)-binding protein-3 and the IGFs. *J Biol Chem.* 1999; 274(9):5292-5298.(Biology)

Shang Y, Baumrucker CR, Green MH. Signal relay by retinoic acid receptors alpha and beta in the retinoic acid-induced expression of insulin-like growth factor-binding protein-3 in breast cancer cells. *J Biol Chem.* 1999; 274(25):18005-18010.(Biology)