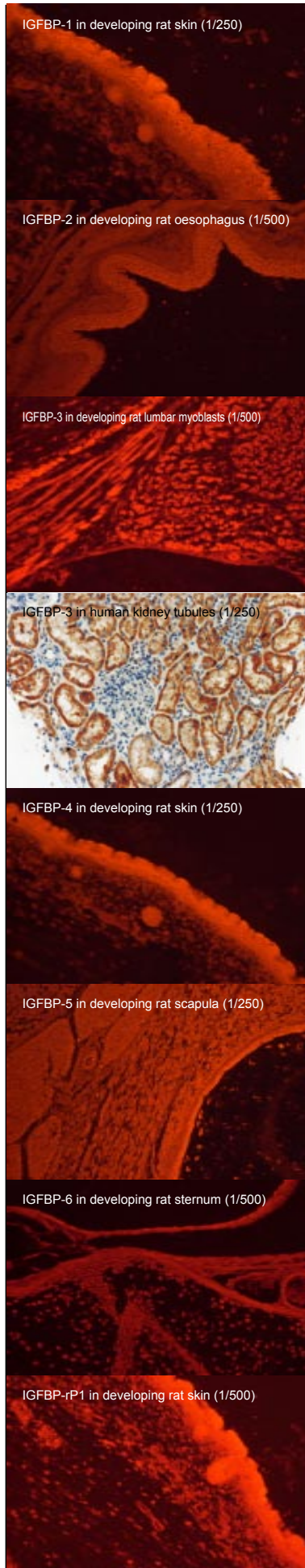


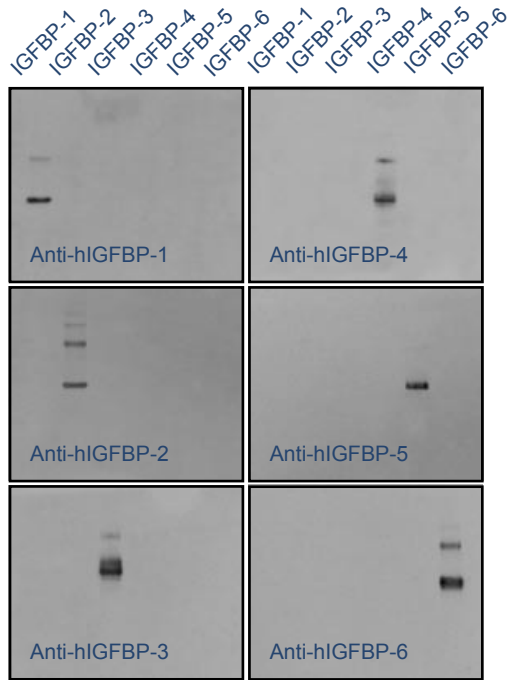


# Detecting IGFBPs

## Detecting IGFBPs by Immunohistochemistry



### Western Immunoblotting of human IGFBPs:



◆ GroPep human IGFBPs separated by SDS-PAGE  
(10 % - 20 % Tricine, non-reducing)

◆ Probed with each GroPep anti-human IGFBP antisera (1/1,000)

Anti-human IGFBP-1	Code: PAP1	(EIA: 1/1,000)
Anti-human IGFBP-2	Code: PAQ1	(EIA: 1/5,000)
Anti-human IGFBP-3	Code: PAV1	(EIA: 1/65,000)
Anti-human IGFBP-4	Code: PAR1	(EIA: 1/1,000)
Anti-human IGFBP-5	Code: PAZ1	(EIA: 1/50,000)
Anti-human IGFBP-6	Code: PAU1	(EIA: 1/35,000)
Anti-human IGFBP-rP1	Code: PAAW1	(EIA: 1/150,000) - not shown

All supplied as 100 µl lyophilised aliquots for US\$220

Detection by ECL.

Minor higher MW bands are multimeric forms of the IGFBPs.

[Click here to view a Western Immunoblotting protocol using these antisera](#)

### Purified IGFBP Antibodies (IgG) for immunohistochemistry:

- ◆ Developed specifically for IGFBP immunohistochemistry.
- ◆ Highly specific. Recognise human and rat IGFBPs.
- ◆ Raised against unique peptide epitopes from the corresponding human IGFBPs.
- ◆ Purified IgG fraction from rabbit antisera.

Rat tissue images obtained from ExtrAvidin-Cy3 staining of transverse 7 µm sections from a formalin fixed, paraffin embedded day 19 foetus (Antibody dilutions shown).

[Click here to view matching negative controls in rat tissues](#)

[Click here to view an ExtrAvidin-Cy3 staining protocol for using these antibodies](#)

Human tissue images obtained from horseradish peroxidase staining of transverse 5 µm sections from a formalin fixed, paraffin embedded human kidney (Antibody dilution shown).

[Click here to view a horseradish peroxidase staining protocol for these antibodies](#)

For information on any of these reagents, click on the product title.

IGFBP-1, antibody for immunohistochemistry	Code: PAAH1
IGFBP-2, antibody for immunohistochemistry	Code: PAAI1
IGFBP-3, antibody for immunohistochemistry	Code: PAAJ1
IGFBP-4, antibody for immunohistochemistry	Code: PAAG1
IGFBP-5, antibody for immunohistochemistry	Code: PAAF1
IGFBP-6, antibody for immunohistochemistry	Code: PAAE1
IGFBP-rP1, antibody for immunohistochemistry	Code: PAAD1

All supplied as 20 µg lyophilised aliquots for US\$250

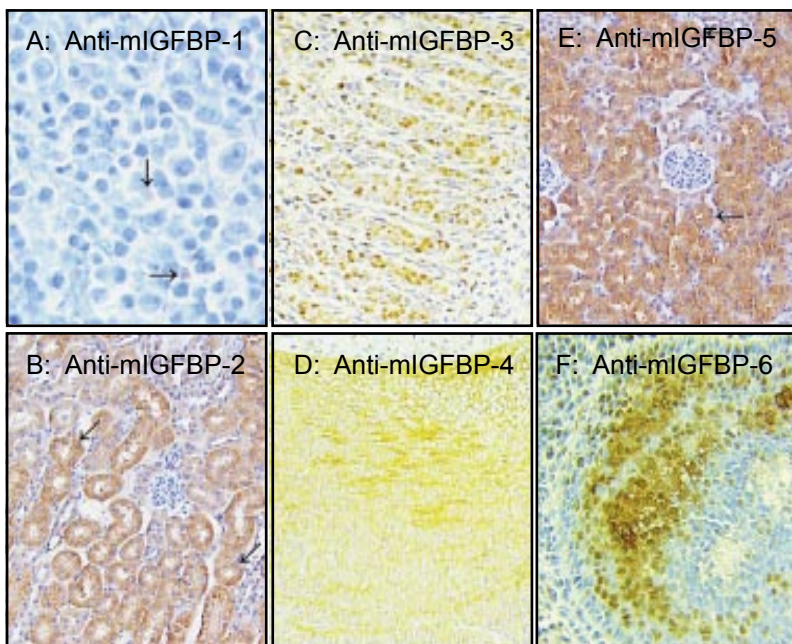
**For Negative Controls:**

Pre-immune normal rabbit IgG      100 µg      Code: NRI01      US\$55

Multi-product Packs also available. [Click here for details.](#)

## Detecting IGFBPs by Immunoblotting

### Immunohistochemical localization of mouse IGFBPs



**Anti-Mouse/Rat** (Characterized for IHC)

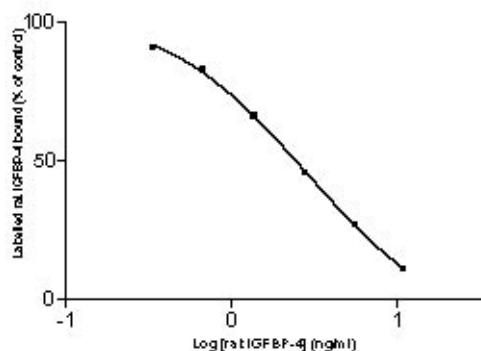
Anti-mouse/rat IGFBP-1	Code: PAJ1
Anti-mouse/rat IGFBP-2	Code: PAS1
Anti-mouse/rat IGFBP-3	Code: PAK1
Anti-mouse/rat IGFBP-4	Code: PAW1
Anti-mouse/rat IGFBP-5	Code: PAX1
Anti-mouse/rat IGFBP-6	Code: PAY1

All supplied as 100 µl lyophilised aliquots for US\$220

- A. Embryonic mouse liver and GroPep anti-mouse IGFBP-1 (1/250). Staining indicated
- B. Adult mouse kidney and GroPep anti-mouse IGFBP-2 (1/250). Staining indicated
- C. Embryonic mouse tongue and GroPep anti-mouse IGFBP-3 (1/250).
- D. Embryonic mouse hindbrain and GroPep anti-mouse IGFBP-4 (1/250).
- E. Adult mouse kidney and GroPep anti-mouse IGFBP-5 (1/250). Staining indicated
- F. Embryonic mouse nasal epithelium and GroPep anti-mouse IGFBP-6 (1/250).

Mouse IGFBP immunohistochemistry adapted from:  
 van Kleffens, M. *et al.*, *Endocrinology*, **140**, 5944-5952, 1999.  
 © The Endocrine Society, (Reproduced with permission)

### Radioimmunoassay (RIA) of Rat IGFBP-4



**Anti-Rat** (Characterized for RIA)

Anti-rat IGFBP-4	Code: PAAP1
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Supplied as 100 ul lyophilised aliquot for US\$220

Radioimmunoassay of GroPep rat IGFBP-4 using GroPep's anti-rat IGFBP-4 antiserum.  
 Can detect the very low concentrations of IGFBP-4 in rat serum (200 ng/ml) and can detect samples containing 1 ng rat IGFBP-4.

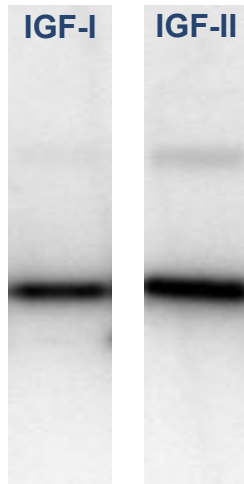
[Click here for protocol for iodination of rat IGFBP-4](#)  
[Click here for rat IGFBP-4 RIA protocol](#)

References:  
 Chelius, D., Baldwin, M. A. and Spencer, E. M. *J. Endocrinol.*, **168**, 283-296, 2001.  
 Chelius, D. and Spencer, E. M. *Growth Hormone and IGF Research*, **11**, 49-57, 2001.



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 Facsimile: +61 8 8354 7788      Website: [www.gropep.com.au](http://www.gropep.com.au)

## Western Ligand Blotting



Western Ligand Blot of *in situ* binding of <sup>125</sup>I-IGF-I and <sup>125</sup>I-IGF-II by bovine IGFBP-2

Minor higher molecular weight band is a dimer of IGFBP-2.

[Click here for Western Ligand Blotting method using iodinated IGFs](#)

[Click here for Western Ligand Blotting method using biotinylated IGFs](#)

	Human IGFBP-1	Bovine IGFBP-2	GARA-Bovine IGFBP-2 <sup>a</sup>	Human IGFBP-2	Human IGFBP-3	Human IGFBP-4	Rat IGFBP-4	Human IGFBP-5	Mouse IGFBP-5	Rat IGFBP-5	Human IGFBP-6
Human IGF-I	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Human IGF-II	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Binding of biotinyl- or <sup>125</sup>I-labelled IGF-I and IGF-II by GroPep IGFBPs

<sup>a</sup> GARA-IGFBP-2 is an isoform of bovine IGFBP-2 with a 4 aa N-terminal extension resulting from partial processing of the leader peptide.

GARA-IGFBP-2 has similar affinity to IGF-II and approximately 4 fold higher affinity for IGF-I compared to IGF-II by BIAcore Analysis.

To see GroPep's range of IGFBP-related products, or to learn more about the IGF system, click on the links below:

[GroPep IGFBPs and IGFBP antibodies](#)

[IGFBP Immunohistochemistry](#)

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[GroPep IGFs and IGF Antibodies](#)

[IGF-I Analogs from GroPep \(Technical Bulletin No. 2\)](#)

[IGF-II Analogs from GroPep \(Technical Bulletin No. 3\)](#)

[Biotinylated IGFs \(Technical Bulletin No. 4\)](#)

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[The Type 1 IGF Receptor and the Insulin Receptor \(Technical Bulletin No. 7\)](#)

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