

**Anti-IGFBP1 Picoband Antibody**  
**Catalog # ABO10126****Specification**

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**Anti-IGFBP1 Picoband Antibody - Product Information**

Application	WB, IHC-P
Primary Accession	<a href="#">P08833</a>
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Insulin-like growth factor-binding protein 1(IGFBP1) detection. Tested with WB, IHC-P in Human.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-IGFBP1 Picoband Antibody - Additional Information**

**Gene ID** 3484

**Other Names**

Insulin-like growth factor-binding protein 1, IBP-1, IGF-binding protein 1, IGFBP-1, Placental protein 12, PP12, IGFBP1, IBP1

**Calculated MW**

27904 MW KDa

**Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat<br><br>Western blot, 0.1-0.5 µg/ml, Human<br>

**Subcellular Localization**

Secreted.

**Protein Name**

Insulin-like growth factor-binding protein 1

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

**Immunogen**

E.coli-derived human IGFBP1 recombinant protein (Position: A69-N259). Human IGFBP1 shares 67.8% and 69.3% amino acid (aa) sequence identity with mouse and rat IGFBP1, respectively.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Anti-IGFBP1 Picoband Antibody - Protein Information**

**Name** IGFBP1

**Synonyms** IBP1

**Function**

Multifunctional protein that plays a critical role in regulating the availability of IGFs such as IGF1 and IGF2 to their receptors and thereby regulates IGF-mediated cellular processes including cell migration, proliferation, differentiation or apoptosis in a cell-type specific manner (PubMed: [11397844](http://www.uniprot.org/citations/11397844), PubMed: [15972819](http://www.uniprot.org/citations/15972819)). Also plays a positive role in cell migration by interacting with integrin ITGA5:ITGB1 through its RGD motif (PubMed: [7504269](http://www.uniprot.org/citations/7504269)). Mechanistically, binding to integrins leads to activation of focal adhesion kinase/PTK2 and stimulation of the mitogen-activated protein kinase (MAPK) pathway (PubMed: [11397844](http://www.uniprot.org/citations/11397844)). Regulates cardiomyocyte apoptosis by suppressing HIF-1α/HIF1A ubiquitination and subsequent degradation (By similarity).

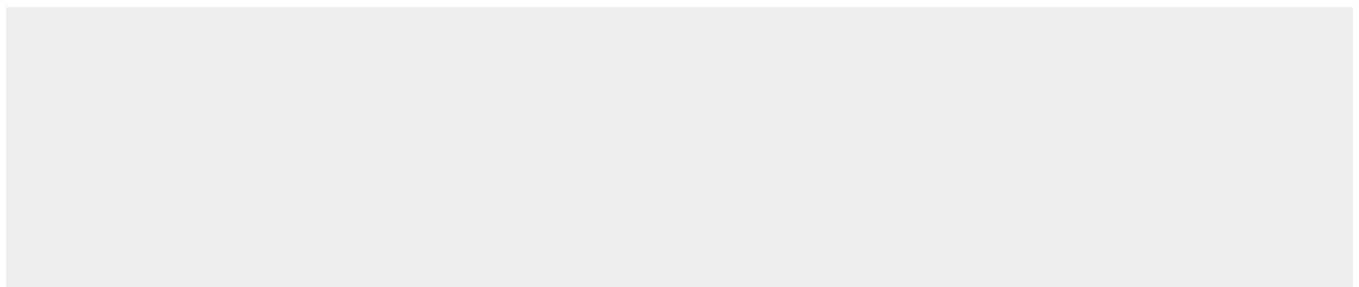
**Cellular Location**

Secreted.

**Anti-IGFBP1 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-IGFBP1 Picoband Antibody - Images**

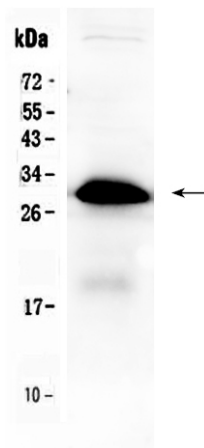


Figure 1. Western blot analysis of IGFBP1 using anti-IGFBP1 antibody (ABO10126). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-IGFBP1 antigen affinity purified polyclonal antibody (Catalog # ABO10126) at 0.5  $\mu$ g/mL overnight at 4 $^{\circ}$ C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for IGFBP1 at approximately 30KD. The expected band size for IGFBP1 is at 30KD.

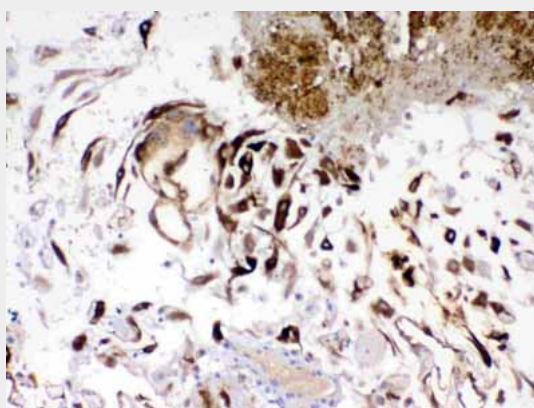


Figure 2. IHC analysis of IGFBP1 using anti-IGFBP1 antibody (ABO10126). IGFBP1 was detected in paraffin-embedded section of human placenta tissues. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1  $\mu$ g/ml rabbit anti-IGFBP1 Antibody (ABO10126) overnight at 4 $^{\circ}$ C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 $^{\circ}$ C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

#### Anti-IGFBP1 Picoband Antibody - Background

IGFBP1, Insulin-like growth factor-binding protein 1, also known as placental protein 12 (PP12), is a protein that in humans is encoded by the IGFBP1 gene. The IGFBP1 gene has 4 exons and spans 5.9 kb. And the IGFBP1 gene is localized to 7p13-p12 by in situ hybridization. This gene is a member of

the Insulin-like growth factor-binding protein (IGFBP) family and encodes a protein with an IGFBP domain and a type-I thyroglobulin domain. The protein binds both insulin-like growth factors (IGFs) I and II and circulates in the plasma. Binding of this protein prolongs the half-life of the IGFs and alters their interaction with cell surface receptors. Alternate transcriptional splice variants, encoding different isoforms, have been characterized.