

Datasheet for ABIN5518921  
**anti-IGFBP5 antibody (AA 60-272)**



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## Overview

Quantity:	100 µg
Target:	IGFBP5
Binding Specificity:	AA 60-272
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IGFBP5 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

## Product Details

Purpose:	Rabbit IgG polyclonal antibody for Insulin-like growth factor-binding protein 5(IGFBP5) detection. Tested with WB, ELISA in Human.
Immunogen:	E. coli-derived human IGFBP5 recombinant protein (Position: A60-E272). Human IGFBP5 shares 96.7% and 96.2% amino acid (aa) sequence identity with mouse and rat IGFBP5, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross reactivity with other proteins.
Characteristics:	<p>Rabbit IgG polyclonal antibody for Insulin-like growth factor-binding protein 5(IGFBP5) detection. Tested with WB, ELISA in Human.</p> <p>Gene Name: insulin like growth factor binding protein 5</p> <p>Protein Name: Insulin-like growth factor-binding protein 5</p>
Purification:	Immunogen affinity purified.

## Target Details

Target:	IGFBP5
Alternative Name:	IGFBP5 ( <a href="#">IGFBP5 Products</a> )
Background:	<p>Insulin-like growth factor-binding protein 5 is a protein that in humans is encoded by the IGFBP5 gene. The expression of IGFBP5 by stable transfection and adenovirus-mediated infection is inhibitory to growth in 2 human breast cancer cell lines. IGFBP5 expression leads to G2/M cell cycle arrest and apoptosis. Stable expression of IGFBP5 in the breast cancer cell lines also inhibits the formation and growth of tumors following injection in athymic mice. It is concluded that IGFBP5 is a growth inhibitor and proapoptotic agent in breast cancer cells. Additionally, IGFBP-5 is expressed by fibroblasts, myoblasts and osteoblasts, making it the predominant IGFBP found in bone extracts. It has a strong affinity for hydroxyapatite, allowing it to bind to bone cells. When bound to extracellular matrix, IGFBP-5 is protected from proteolysis and potentiates IGF activity, but when it is soluble, IGFBP-5 is cleaved to a biologically inactive 21 kDa fragment (1, 2).</p> <p>Synonyms: Insulin-like growth factor-binding protein 5, IBP-5, IGF-binding protein 5, IGFBP-5, IGFBP5, IBP5</p>
Gene ID:	3488
UniProt:	<a href="#">P24593</a>
Pathways:	<a href="#">WNT Signaling</a> , <a href="#">Carbohydrate Homeostasis</a> , <a href="#">Myometrial Relaxation and Contraction</a> , <a href="#">Regulation of Carbohydrate Metabolic Process</a> , <a href="#">Autophagy</a> , <a href="#">Smooth Muscle Cell Migration</a> , <a href="#">Growth Factor Binding</a>

## Application Details

Application Notes:	<p>WB: Concentration: 0.1-0.5 µg/mL, Tested Species: Human</p> <p>ELISA: Concentration: 0.1-0.5 µg/mL, Tested Species: Human</p> <p>Notes: Tested Species: Species with positive results.</p> <p>Other applications have not been tested. Optimal dilutions should be determined by end users.</p>
Comment:	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.
Restrictions:	For Research Use only

## Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C, -20 °C
Storage Comment:	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.

## Publications

Product cited in:	<p>Wan, Ma, Mei, Shan: "The effects of HIF-1alpha on gene expression profiles of NCI-H446 human small cell lung cancer cells." in: <b>Journal of experimental &amp; clinical cancer research : CR</b>, Vol. 28, pp. 150, (2010) (<a href="#">PubMed</a>).</p> <p>Hou, Zhang, Liu, Meng, Qiao: "Expressions of IGFBP-5, cFLIP in cervical intraepithelial neoplasia, cervical carcinoma and their clinical significances: a molecular pathology." in: <b>Journal of experimental &amp; clinical cancer research : CR</b>, Vol. 28, pp. 70, (2009) (<a href="#">PubMed</a>).</p> <p>Khullar, Sehgal: "Evaluation of CIEP and ELISA in a rodent malaria model." in: <b>Indian journal of pathology &amp; microbiology</b>, Vol. 32, Issue 4, pp. 252-5, (1990) (<a href="#">PubMed</a>).</p> <p>Fruscella: "[Liposuction in plastic surgery]." in: <b>Minerva ginecologica</b>, Vol. 41, Issue 4, pp. 195-7, (1989) (<a href="#">PubMed</a>).</p>
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Western Blotting

**Image 1.** Western blot analysis of IGFBP5 using anti-IGFBP5 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: recombinant human IGFBP5 protein1ng. 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-IGFBP5 antigen affinity purified polyclonal antibody (Catalog # ) at 0.5 µg/mL overnight at 4°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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for IGFBP5 at approximately 34KD. The expected band size for IGFBP5 is at 28KD.