

Anti-IGFBP2 Picoband Antibody

Catalog # ABO12941

Specification

Anti-IGFBP2 Picoband Antibody - Product Information

ApplicationWB, IHC-P, EPrimary AccessionIGFBP2: P18065HostRabbitReactivityHuman, Mouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for IGFBP2 detection. Tested with WB, IHC-P, ELISA(Cap) inHuman;Mouse;Rat.Human;Mouse;Rat.

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

Anti-IGFBP2 Picoband Antibody - Additional Information

Application Details Western blot, 0.1-0.5 μg/ml

 Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml

 ELISA(Cap), 0.1-0.5 μg/ml

Subcellular Localization Secreted.

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen E. coli-derived human IGFBP2 recombinant protein (Position: A36-Q325).

Purification Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, 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-IGFBP2 Picoband Antibody - Protein Information



Anti-IGFBP2 Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-IGFBP2 Picoband Antibody - Images

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Figure 1. Western blot analysis of IGFBP2 using anti-IGFBP2 antibody (ABO12941). 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 HepG2 whole cell 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-IGFBP2 antigen affinity purified polyclonal antibody (Catalog # ABO12941) at 0.5 ug/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 with Tanon 5200 system. A specific band was detected for IGFBP2 at approximately 35KD. The expected band size for IGFBP2 is at 35KD.





Figure 2. IHC analysis of IGFBP2 using anti-IGFBP2 antibody (ABO12941).IGFBP2 was detected in paraffin-embedded section of human lung cancer tissue. 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 1ug/ml rabbit anti-IGFBP2 Antibody (ABO12941) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



Figure 3. IHC analysis of IGFBP2 using anti-IGFBP2 antibody (ABO12941).IGFBP2 was detected in paraffin-embedded section of human mammary cancer tissue. 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 1ug/ml rabbit anti-IGFBP2 Antibody (ABO12941) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

Anti-IGFBP2 Picoband Antibody - Background

The superfamily of insulin-like growth factor (IGF) binding proteins include the six high-affinity IGF binding proteins (IGFBP) and at least four additional low-affinity binding proteins referred to as IGFBP related proteins (IGFBP-rP). All IGFBP superfamily members are cysteine-rich proteins with conserved cysteine residues, which are clustered in the amino- and carboxy-terminal thirds of the molecule. IGFBPs modulate the biological activities of IGF proteins. Some IGFBPs may also have intrinsic bioactivity that is independent of their ability to bind IGF proteins. Post-translational modifications of IGFBPs, including glycosylation, phosphorylation and proteolysis, have been shown to modify the affinities of the binding proteins to IGF. Human IGFBP-2 cDNA encodes a 328 amino acid (aa) residue precursor protein with a putative 39 aa residue signal peptide that is processed to generate the 289 aa residue mature protein. IGFBP-2 contains an integrin receptor recognition sequence (RGD sequence) but lacks potential N-linked glycosylation sites. During development, IGFBP-2 is expressed in a number of tissues. The highest expression level is found in the central



nervous system. In adults, high expression levels are also detected in the central nervous system and in a number of reproductive tissues. IGFBP-2 binds preferentially to IGF II, exhibiting a 2-10 fold higher affinity for IGF II than for IGF I.