Datasheet for ABIN5518994

anti-Vitamin D-Binding Protein antibody (AA 17-256)

5 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	Vitamin D-Binding Protein (GC)
Binding Specificity:	AA 17-256
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Vitamin D-Binding Protein antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA

Product Details

Purpose:	Anti-Vitamin D Binding protein/GC Antibody Picoband®
Immunogen:	E. coli-derived human Vitamin D Binding protein recombinant protein (Position: L17-E256).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Rabbit IgG polyclonal antibody for Vitamin D Binding protein detection. Tested with WB, IHC-P, Direct ELISA in Human,Mouse,Rat. Gene Name: GC, vitamin D binding protein Protein Name: Vitamin D-binding protein
Purification:	Immunogen affinity purified.

Target Details

Target:	Vitamin D-Binding Protein (GC)
Alternative Name:	Vitamin D Binding Protein (GC Products)
Background:	Synonyms: Vitamin D-binding protein, DBP, VDB, Gc protein-derived macrophage activating factor Tissue Specificity: Expressed in the liver. Found in plasma, ascites, cerebrospinal fluid and urine. Background: Vitamin D-binding protein, also/originally known as gc-globulin (group-specific component), is a protein that in humans is encoded by the GC gene.The protein encoded by this gene belongs to the albumin gene family. It is a multifunctional protein found in plasma, ascitic fluid, cerebrospinal fluid and on the surface of many cell types. It binds to vitamin D and its plasma metabolites and transports them to target tissues.
Molecular Weight:	53 kDa
Gene ID:	2638
Pathways:	Metabolism of Steroid Hormones and Vitamin D, Monocarboxylic Acid Catabolic Process

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/mL ELISA, 0.1-0.5 µg/mL 1. Mikkelsen M, Jacobsen P, Henningsen K (Jul 1977). "Possible localization of Gc-System on chromosome 4. Loss of long arm 4 material associated with father-child incompatibility within the Gc-System". Hum Hered. 27 (2): 105-7. 2. Yamamoto N, Suyama H, Yamamoto N (2008). "Immunotherapy for Prostate Cancer with GcProtein-Derived Macrophage-Activating Factor, GcMAF" ([PDF]). TRANSLATIONAL ONCOLOGY. 1 (2): 65-72.
Comment:	We recommend Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Restrictions:	For Research Use only

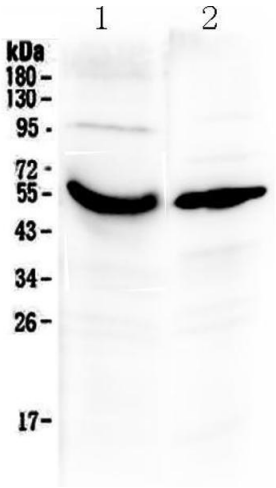
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Handling

Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4, 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:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

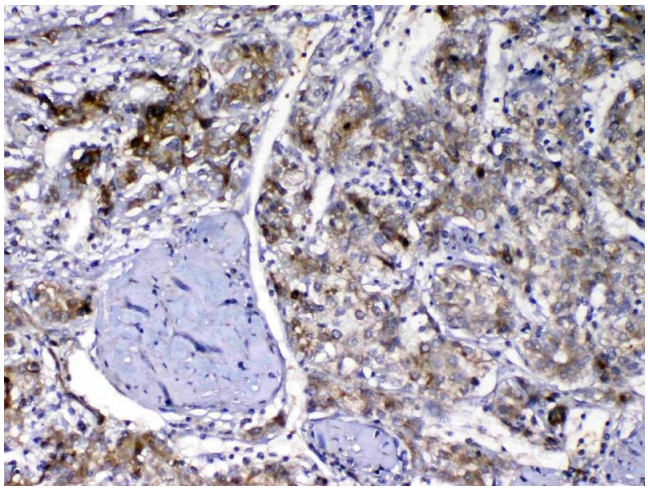
Images



Western Blotting

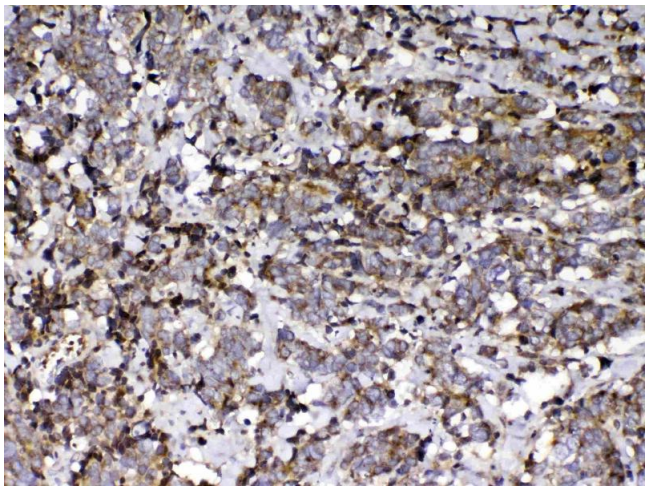
Image 1. Western blot analysis of Vitamin D Binding protein using anti-Vitamin D Binding protein antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: human placenta tissue lysates, Lane 2: human A431 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-Vitamin D Binding protein antigen affinity purified polyclonal antibody (Catalog #) 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 (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for Vitamin D Binding protein at approximately 53KD. The expected band size for

Vitamin D Binding protein is at 53KD.



Immunohistochemistry

Image 2. IHC analysis of Vitamin D Binding protein using anti-Vitamin D Binding protein antibody .Vitamin D Binding protein was detected in paraffin-embedded section of human liver 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-Vitamin D Binding protein Antibody 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)(Catalog # SA1022) with DAB as the chromogen.



Immunohistochemistry

Image 3. IHC analysis of Vitamin D Binding protein using anti-Vitamin D Binding protein antibody .Vitamin D Binding protein 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-Vitamin D Binding protein Antibody 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)(Catalog # SA1022) with DAB as the chromogen.

Please check the product details page for more images. Overall 5 images are available for ABIN5518994.