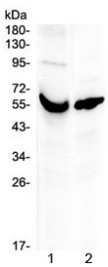
VDBP Antibody / Metabolic Carrier Protein Antibody (R32942)

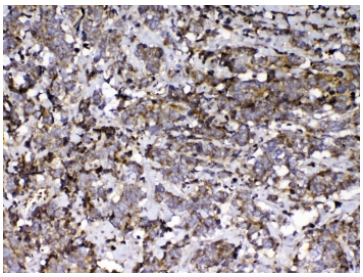
Catalog No.	Formulation	Size
R32942	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

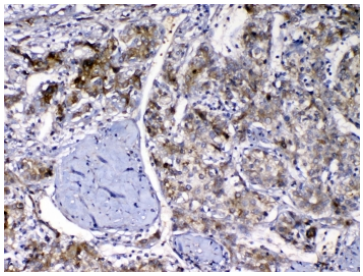
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
UniProt	P02774
Applications	Western Blot : 0.5-1ug/ml IHC (FFPE) : 1-2ug/ml Direct ELISA (recombinant Human Protein) : 0.1-0.5ug/ml (BSA-free format available)
Limitations	This VDBP Antibody / Metabolic Carrier Protein Antibody is available for research use only.



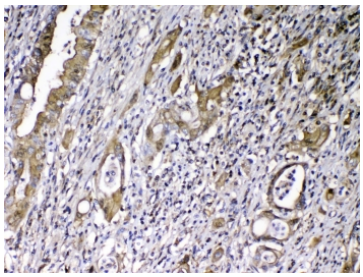
VDBP Antibody Placenta and A431 WB. Western blot analysis of human placenta and A431 cell lysates using VDBP antibody demonstrates prominent bands at approximately 53 kDa, consistent with the predicted molecular weight of Vitamin D binding protein / VDBP, a circulating serum transport protein involved in vitamin D metabolite distribution and systemic metabolic homeostasis. The observed expression profile aligns with the secretory and carrier-associated biology of this abundant endocrine transport protein. Antibody testing was performed at 0.5 ug/ml.



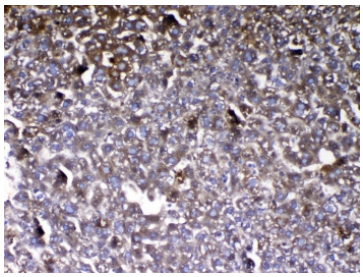
VDBP Antibody Lung Cancer IHC. Immunohistochemistry analysis of FFPE human lung cancer tissue stained with VDBP antibody demonstrates diffuse granular cytoplasmic HRP-DAB brown staining throughout tumor-associated epithelial cellular populations, consistent with the role of Vitamin D binding protein / VDBP in circulating transport physiology and systemic metabolic regulation pathways. The observed staining profile aligns with the secretory biology of this vitamin D-associated carrier protein. Required HIER: steam tissue sections in pH 6 citrate buffer for 20 min and allow to cool prior to testing.



VDBP Antibody Liver Cancer IHC. Immunohistochemistry analysis of FFPE human liver cancer tissue stained with VDBP antibody demonstrates granular cytoplasmic HRP-DAB brown staining within tumor-associated hepatic epithelial cellular populations, consistent with expression of Vitamin D binding protein / VDBP in hepatic secretory and serum transport-associated pathways. The observed staining pattern aligns with the biologic role of VDBP as a circulating carrier protein involved in vitamin D metabolism and endocrine homeostasis. Required HIER: steam tissue sections in pH 6 citrate buffer for 20 min and allow to cool prior to testing.



VDBP Antibody Rectal Cancer IHC. Immunohistochemistry analysis of FFPE human rectal cancer tissue stained with VDBP antibody demonstrates granular cytoplasmic HRP-DAB brown staining within gland-forming tumor epithelial cellular populations, consistent with expression of Vitamin D binding protein / VDBP in circulating transport and metabolic homeostasis-associated pathways. The observed staining profile aligns with the secretory biology of this vitamin D-associated serum carrier protein within epithelial-derived tumor tissue. Required HIER: steam tissue sections in pH 6 citrate buffer for 20 min and allow to cool prior to testing.



VDBP Antibody Mouse Liver IHC. Immunohistochemistry analysis of FFPE mouse liver tissue stained with VDBP antibody demonstrates diffuse granular cytoplasmic HRP-DAB brown staining throughout hepatocyte-associated cellular populations, consistent with the role of Vitamin D binding protein / VDBP as a major hepatic secretory and circulating transport protein involved in vitamin D metabolism and systemic endocrine homeostasis. The widespread staining profile aligns with the established liver-associated expression of this abundant serum carrier protein. Required HIER: steam tissue sections in pH 6 citrate buffer for 20 min and allow to cool prior to testing.

Description

Vitamin D binding protein (VDBP), also known as Group-specific component (GC), is a circulating serum transport protein involved in vitamin D metabolite transport, extracellular actin scavenging, and systemic metabolic regulation. The VDBP Antibody / Metabolic Carrier Protein Antibody is designed for detection of VDBP expression in studies involving endocrine metabolism, hepatic protein secretion, circulating transport pathways, and vitamin D-associated physiologic regulation.

VDBP is encoded by the GC gene on chromosome 4q13 and is synthesized primarily by hepatocytes prior to secretion into plasma and extracellular fluids. The protein functions as the major carrier of vitamin D and its metabolites within the circulation, thereby regulating systemic distribution and bioavailability of vitamin D-associated endocrine signaling molecules. Because VDBP is abundant in serum and extracellular compartments, it serves as an important component of metabolic transport and endocrine homeostasis pathways.

Beyond vitamin D transport, VDBP participates in extracellular actin scavenging and inflammatory response-associated signaling mechanisms. The protein may contribute to immune-associated pathways involving macrophage activation, tissue injury responses, and cytokine-responsive inflammatory regulation. Altered VDBP expression or circulating levels have been associated with liver dysfunction, kidney-associated disease states, inflammatory signaling abnormalities, and metabolic disorders affecting calcium and phosphate balance.

Western blot analysis using VDBP antibodies commonly demonstrates bands corresponding to endogenous VDBP protein in serum-associated and hepatocyte-derived tissue lysates, while immunohistochemical staining may reveal cytoplasmic localization patterns within hepatic and epithelial cellular populations consistent with the secretory biology of this circulating carrier protein. The rabbit polyclonal format supports recognition of multiple VDBP-associated epitopes and may enhance target detection across denatured and native protein preparations.

VDBP continues to serve as an important target in studies involving vitamin D metabolism, endocrine signaling, liver-associated physiology, and systemic metabolic transport pathways. For highly selective detection of VDBP in vitamin D transport and endocrine metabolism studies, see our VDBP Antibody / Vitamin D Binding Protein Antibody clone VDBP/4481 featuring protein microarray specificity validation.

Application Notes

Optimal dilution of the VDBP Antibody / Metabolic Carrier Protein Antibody should be determined by the researcher.

Immunogen

A recombinant human protein corresponding to amino acids L17-E256 was used as the immunogen for the VDBP antibody.

Storage

After reconstitution, the VDBP antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

VDBP antibody, Vitamin D binding protein antibody, GC antibody, Serum transport protein antibody, Metabolic carrier protein antibody

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