## Vitamin D Binding protein Rabbit mAb

Catalog No: #49422

Package Size: #49422-1 50ul #49422-2 100ul



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### Description

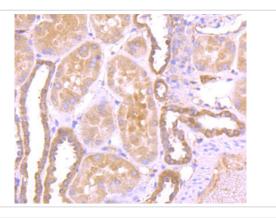
Product Name	Vitamin D Binding protein Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JM10-36
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC, FC
Species Reactivity	Hu
Immunogen Description	recombinant protein
Other Names	DBP antibody DBP/GC antibody GC antibody Gc globulin antibody Gc-globulin antibody GRD3 antibody
	Group specific component antibody Group specific component vitamin D binding protein antibody
	Group-specific component antibody hDBP antibody VDB antibody VDBG antibody VDBP antibody Vitamin
	D binding alpha globulin antibody Vitamin D-binding protein antibody VTDB_HUMAN antibody
Accession No.	Swiss-Prot#:P02774
Calculated MW	53 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

### **Application Details**

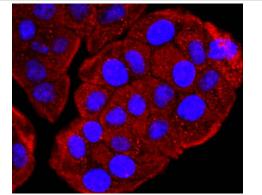
WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

# kDa -70 -55 -40 -35

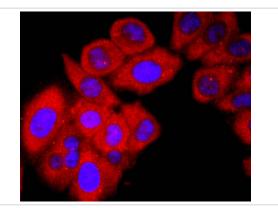
Western blot analysis of DBP on human lung lysates using anti- DBP antibody at 1/1,000 dilution.



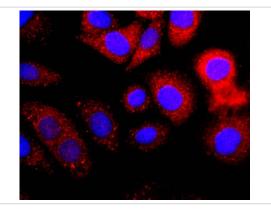
Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti- DBP antibody. Counter stained with hematoxylin.



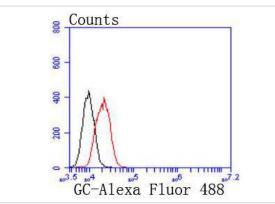
ICC staining DBP in Hela cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining DBP in HepG2 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining DBP in SKOV-3 cells (red). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of HepG2 cells with DBP antibody at 1/50 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti rabbit IgG was used as the secondary antibody.

### Background

Vitamin D-binding protein (DBP) is a multi-functional serum protein that binds to the plasma membranes of numerous cell types and mediates a variety of cellular functions. The locus of the DBP protein (also known as group-specific component protein or GC) is located at human chromosome 4q13.3. DBP functions in organ-specific transportation of vitamin D and its metabolites to the various target organs of the vitamin D endocrine system. In addition, DBP has immunomodulatory properties and is able to bind to the surface of leukocytes. DBP binds to the plasma membrane through a chondroitin sulfate proteoglycan. DBP serves as a co-chemotactic factor for C5a to enhance the chemotactic activity of C5a. DBP can also bind to globular Actin with high affinity and is involved in the clearance of Actin from the blood. DBP plays an important role in osteoclast differentiation. The diverse cellular functions of DBP require its cell surface binding ability to mediate different biological processes.

#### References

- 1. Ackermann AM et al. Integration of ATAC-seq and RNA-seq identifies human alpha cell and beta cell signature genes. Mol Metab 5:233-44 (2016).
- 2. Tao W et al. Hormonal induction and roles of Disabled-2 in lactation and involution. PLoS One 9:e110737 (2014).

Note: This product is for in vitro research use only and is not intended for use in humans or animals.