

### **GGCX Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11117c

### Specification

## **GGCX Antibody (Center) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>P38435</u> <u>O88496</u>, <u>NP\_000812.2</u> Human Rat Rabbit Polyclonal Rabbit IgG 87561 548-578

## **GGCX** Antibody (Center) - Additional Information

Gene ID 2677

**Other Names** 

Vitamin K-dependent gamma-carboxylase, Gamma-glutamyl carboxylase, Peptidyl-glutamate 4-carboxylase, Vitamin K gamma glutamyl carboxylase, GGCX, GC

#### Target/Specificity

This GGCX antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 548-578 amino acids from the Central region of human GGCX.

**Dilution** WB~~1:1000 IHC-P~~1:50~100

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

GGCX Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **GGCX Antibody (Center) - Protein Information**

Name GGCX



# Synonyms GC

**Function** Mediates the vitamin K-dependent carboxylation of glutamate residues to calcium-binding gamma-carboxyglutamate (Gla) residues with the concomitant conversion of the reduced hydroquinone form of vitamin K to vitamin K epoxide (PubMed:<u>17073445</u>). Catalyzes gamma-carboxylation of various proteins, such as blood coagulation factors (F2, F7, F9 and F10), osteocalcin (BGLAP) or matrix Gla protein (MGP) (PubMed:<u>17073445</u>).

### **Cellular Location**

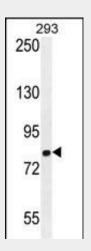
Endoplasmic reticulum membrane; Multi-pass membrane protein

## **GGCX Antibody (Center) - Protocols**

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

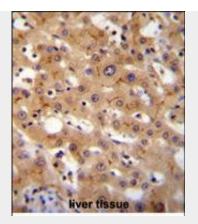
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### GGCX Antibody (Center) - Images



GGCX Antibody (Center) (Cat. #AP11117c) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the GGCX antibody detected the GGCX protein (arrow).





GGCX Antibody (Center) (Cat. #AP11117c)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of GGCX Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

## GGCX Antibody (Center) - Background

This gene encodes an enzyme which catalyzes the posttranslational modification of vitamin K-dependent protein. Many of these vitamin K-dependent proteins are involved in coagulation so the function of the encoded enzyme is essential for hemostasis. Mutations in this gene are associated with vitamin K-dependent coagulation defect and PXE-like disorder with multiple coagulation factor deficiency. Multiple transcript variants encoding different isoforms have been found for this gene.

### **GGCX Antibody (Center) - References**

Higgins-Gruber, S.L., et al. J. Biol. Chem. 285(41):31502-31508(2010) King, C.R., et al. Thromb. Haemost. 104(4):750-754(2010) Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Ikejiri, M., et al. Int. J. Hematol. 92(2):302-305(2010) Schelleman, H., et al. Br J Clin Pharmacol 70(3):393-399(2010)