

Rabbit anti-Human, Mouse GGCX Polyclonal Antibody | anti-GGCX antibody

Anti-GGCX Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126239	Rabbit	Human, Mouse	Western Blot, Immunocytochemistry, Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

GGCX; Polyclonal Antibody; Anti-GGCX Antibody Picoband; anti-GGCX antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-GGCX antibody	WB (Western Blot), ICC (Immunocytochemistry), IHC (Immunohistochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human GGCX recombinant protein (Position: M75-A730).
Preparation and Storage	Store at -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of U251 cells using anti-GGCX antibody (AAA126239). Overlay histogram showing U251 cells stained with AAA126239 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GGCX Antibody (AAA126239, 1 ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 3. IF analysis of GGCX using anti-GGCX antibody (AAA126239). GGCX was detected in an immunocytochemical section of CACO-2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-GGCX Antibody (AAA126239) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of GGCX using anti-GGCX antibody (AAA126239). GGCX was detected in a paraffin-embedded section of human hepatic cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-GGCX Antibody (AAA126239) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of GGCX using anti-GGCX antibody (AAA126239). 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 30 ug of sample under reducing conditions. Lane 1: human MCF-7 whole cell lysates, Lane 2: human HEK293 whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human PC-3 whole cell lysates, Lane 5: mouse HEPA1-6 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-GGCX antigen affinity purified polyclonal antibody (#AAA126239) at 0.25 ug/mL overnight at 4 degree 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 1:5000 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 GGCX at approximately 88 kDa. The expected band size for GGCX is at 88 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-GGCX antibody	Gamma-glutamyl carboxylase is an enzyme that in humans is encoded by the GGCX gene, located on chromosome 2 at 2p12. This gene encodes an integral membrane protein of the rough endoplasmic reticulum that carboxylates glutamate residues of vitamin K-dependent proteins to gamma carboxyl glutamate, a modification that is required for their activity. The vitamin K-dependent protein substrates have a propeptide that binds the enzyme, with carbon dioxide, dioxide, and reduced vitamin K acting as co-substrates. Vitamin K-dependent proteins affect a number of physiologic processes including blood coagulation, prevention of vascular calcification, and inflammation. Allelic variants of this gene have been associated with pseudoxanthoma elasticum-like disorder with associated multiple coagulation factor deficiency. Alternative splicing results in multiple transcript variants.
Product Categories/Family for anti-GGCX antibody	Primary Antibodies, Rabbit Polyclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	21361163
NCBI GeneID	2677
NCBI Accession #	NP_000812.2
NCBI GenBank Nucleotide #	NM_000821.5
UniProt Accession #	P38435; Q14415; Q6GU45; B4DMC5; E9PEE1
Molecular Weight	80,989 Da
NCBI Official Full Name	vitamin K-dependent gamma-carboxylase isoform 1
NCBI Official Synonym Full Names	gamma-glutamyl carboxylase
NCBI Official Symbol	GGCX
NCBI Official Synonym Symbols	VKCFD1
NCBI Protein Information	vitamin K-dependent gamma-carboxylase; peptidyl-glutamate 4-carboxylase
UniProt Protein Name	Vitamin K-dependent gamma-carboxylase
UniProt Gene Name	GGCX
UniProt Synonym Gene Names	GC
UniProt Entry Name	VKGC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ggcx-antibody-western-blot-immunocytochemistry-immunohistochemistry-immunofluorescence-flow-cytometry-elisa/126239>