

GCA Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22336a

Product Information

Application WB, FC, IF, E **Primary Accession** P28676 Reactivity Human Host Rabbit Clonality polyclonal Isotype Rabbit IgG **Clone Names** RB57950 **Calculated MW** 24010

Additional Information

Gene ID 25801

Other Names Grancalcin, GCA, GCL

Target/Specificity This GCA antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 19-53 amino acids from the human

region of human GCA.

Dilution WB~~1:2000 FC~~1:25 IF~~1:25 E~~Use at an assay dependent concentration.

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 GCA Antibody (N-Term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name GCA

Synonyms GCL

Function Calcium-binding protein that may play a role in the adhesion of neutrophils

to fibronectin. May play a role in the formation of focal adhesions.

Cellular Location Cytoplasmic granule membrane; Peripheral membrane protein;

Cytoplasmic side. Note=Primarily cytosolic in the absence of calcium or magnesium ions. Relocates to granules and other membranes in response to elevated calcium and magnesium levels

Tissue Location

Detected in neutrophils and macrophages (at protein level). Highly expressed in bone marrow.

Background

Calcium-binding protein that may play a role in the adhesion of neutrophils to fibronectin. May play a role in the formation of focal adhesions.

References

Boyhan A., et al.J. Biol. Chem. 267:2928-2933(1992).

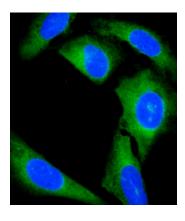
Ota T., et al. Nat. Genet. 36:40-45(2004).

Totoki Y., et al. Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.

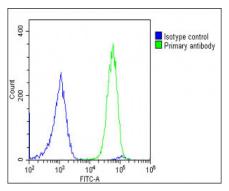
Hillier L.W., et al. Nature 434:724-731(2005).

Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images

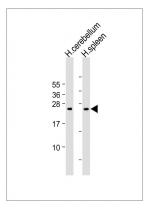


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized U-2 OS (human osteosarcoma cell line) cells labeling GCA with AP22336a at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-rabbit IgG (1583138) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm and weak nucleus staining on U-2 OS cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red).The nuclear counter stain is DAPI (blue).



Overlay histogram showing U-2 OS cells stained with AP22336a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22336a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

All lanes: Anti-GCA Antibody (N-Term) at 1:2000 dilution Lane 1: Human cerebellum lysate Lane 2: Human spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.