

### GCA Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22336a

## **Specification**

#### GCA Antibody (N-Term) - Product Information

Application	IF, WB, FC,E
Primary Accession	<u>P28676</u>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit Ig
Calculated MW	24010

#### GCA Antibody (N-Term) - 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** IF~~1:25

WB~~1:2000 FC~~1:25

#### Format

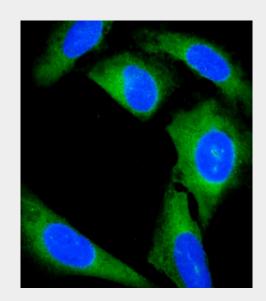
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### 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.



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).



GCA Antibody (N-Term) - 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**

Cytoplasm. 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

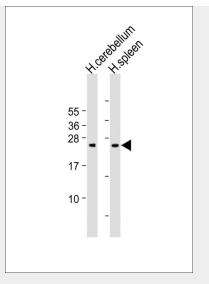
### **Tissue Location**

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

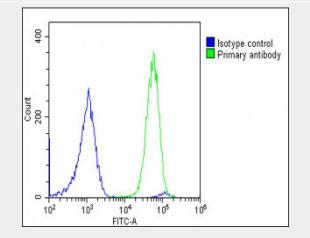
# GCA Antibody (N-Term) - Protocols

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

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



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.



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<sup>®</sup> 488 Conjugated Highly Cross-Adsorbed(OE188374) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was



performed.

# GCA Antibody (N-Term) - 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.

## GCA Antibody (N-Term) - 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.