

GALC Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22090a

Specification

GALC Antibody (N-Term) - Product Information

Application WB, FC,E
Primary Accession P54803

Other Accession <u>P54804</u>, <u>O02791</u>, <u>P54818</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse
Rabbit
Polyclonal
Rabbit IgG
77063
26-56

GALC Antibody (N-Term) - Additional Information

Gene ID 2581

Other Names

Galactocerebrosidase, GALCERase, 3.2.1.46, Galactocerebroside beta-galactosidase, Galactosylceramidase, Galactosylceramide beta-galactosidase, GALC

Target/Specificity

This GALC antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 26-56 amino acids from human GALC.

Dilution

WB~~1:2000

FC~~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

GALC Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

GALC Antibody (N-Term) - Protein Information





Name GALC (HGNC:4115)

Function Hydrolyzes the galactose ester bonds of glycolipids such as galactosylceramide and galactosylsphingosine (PubMed:<u>8281145</u>, PubMed:<u>8399327</u>). Enzyme with very low activity responsible for the lysosomal catabolism of galactosylceramide, a major lipid in myelin, kidney and epithelial cells of small intestine and colon (PubMed:<u>8281145</u>, PubMed:<u>8399327</u>).

Cellular Location Lysosome.

Tissue Location

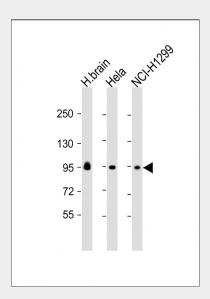
Detected in urine. Detected in testis, brain and placenta (at protein level). Detected in kidney and liver

GALC Antibody (N-Term) - Protocols

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

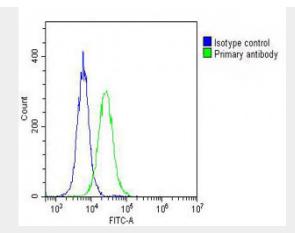
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

GALC Antibody (N-Term) - Images



All lanes: Anti-GALC Antibody (N-Term) at 1:2000 dilution Lane 1: human brain lysate Lane 2: Hela whole cell lysate Lane 3: NCI-H1299 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 77 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Overlay histogram showing Hela cells stained with AP22090a (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 (AP22090a, 1:25 dilution) for 60 min at 37 $^{\circ}$ C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37 $^{\circ}$ C. Isotype control antibody (blue line) was rabbit IgG (1 μ g/1x10 $^{\circ}$ 6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

GALC Antibody (N-Term) - Background

Hydrolyzes the galactose ester bonds of galactosylceramide, galactosylsphingosine, lactosylceramide, and monogalactosyldiglyceride. Enzyme with very low activity responsible for the lysosomal catabolism of galactosylceramide, a major lipid in myelin, kidney and epithelial cells of small intestine and colon.

GALC Antibody (N-Term) - References

Luzi P.,et al.Genomics 26:407-409(1995).
Sakai N.,et al.Biochim. Biophys. Acta 1395:62-67(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Heilig R.,et al.Nature 421:601-607(2003).
Chen Y.Q.,et al.Hum. Mol. Genet. 2:1841-1845(1993).