10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GALC Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP22090a

Product Information

Application	WB, FC, E
Primary Accession	P54803
Other Accession	P54804, O02791, P54818
Reactivity	Human, Mouse
Predicted	Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55884
Calculated MW	77063

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 0.05% (V/V) Proclin 300. 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.

Protein Information

Name	GALC (HGNC:4115)
Function	Hydrolyzes the galactose ester bonds of glycolipids such as galactosylceramide and galactosylsphingosine (PubMed:8281145, PubMed:8399327). 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:8281145, PubMed:8399327).

Cellular Location Lysosome.

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

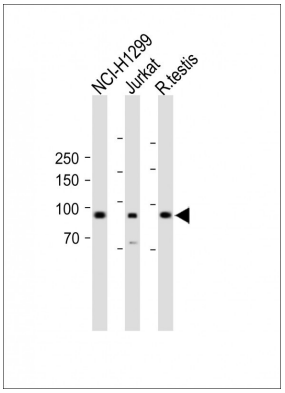
Background

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.

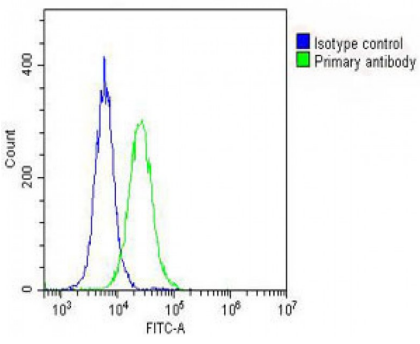
References

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).

Images



All lanes : GALC Antibody (N-Term) at 1:1000 dilution Lane 1 : NCI-H1299 whole cell lysate Lane 2 : Jurkat whole cell lysate Lane 3 : Rat testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size : 80kDa 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°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°C. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.