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CERS4 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP21979a

Product Information

Application	WB, FC, E
Primary Accession	Q9HA82
Reactivity	Human, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB55261
Calculated MW	46399

Additional Information

Gene ID	79603
Other Names	Ceramide synthase 4, CerS4, LAG1 longevity assurance homolog 4, CERS4, LASS4
Target/Specificity	This CERS4 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 21-51 amino acids from human CERS4.
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	CERS4 Antibody (N-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CERS4 {ECO:0000303|PubMed:17977534, ECO:0000312|HGNC:HGNC:23747}
Function	Ceramide synthase that catalyzes formation of ceramide from sphinganine and acyl-CoA substrates, with high selectivity toward long and very-long chains (C18:0-C22:0) as acyl donor.
Cellular Location	Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:Q9D6J1}; Multi-pass membrane protein

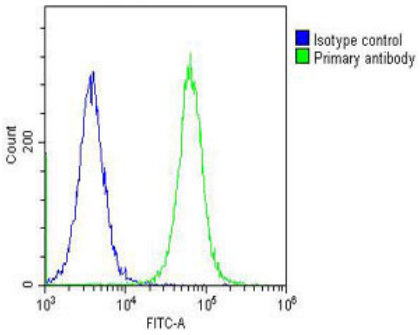
Background

May be either a bona fide (dihydro)ceramide synthase or a modulator of its activity. When overexpressed in cells is involved in the production of sphingolipids containing different fatty acid donors (N-linked stearoyl- (C18) or arachidoyl- (C20) ceramides) in a fumonisin B1-independent manner (By similarity).

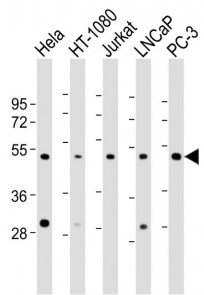
References

Ota T.,et al.Nat. Genet. 36:40-45(2004).
Grimwood J.,et al.Nature 428:529-535(2004).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images



Overlay histogram showing Hela cells stained with AP21979a (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 (AP21979a, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



All lanes : Anti-CERS4 Antibody (N-Term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: HT-1080 whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: LNCaP whole cell lysate Lane 5: PC-3 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 : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.