

LFNG Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9524c

Specification

LFNG Antibody (Center) - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	O8NES3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	41773
Antigen Region	86-114

LFNG Antibody (Center) - Additional Information

Gene ID 3955

Other Names

Beta-1, 3-N-acetylglucosaminyltransferase
lunatic fringe, O-fucosylpeptide
3-beta-N-acetylglucosaminyltransferase,
LFNG

Target/Specificity

This LFNG antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 86-114 amino acids from the Central region of human LFNG.

Dilution

WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

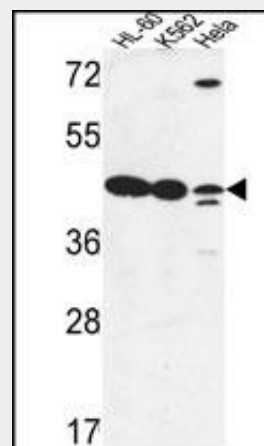
Format

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.

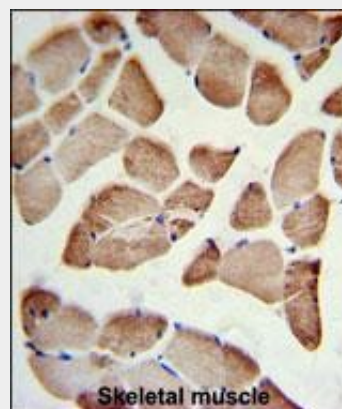
Storage

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



LFNG Antibody (Center) (Cat. #AP9524c) western blot analysis in HL-60, K562, HeLa cell line lysates (35ug/lane). This demonstrates the LFNG antibody detected the LFNG protein (arrow).



LFNG Antibody (Center) (Cat. #AP9524c) IHC analysis in formalin fixed and paraffin embedded skeletal muscle followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the LFNG Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

LFNG Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

LFNG Antibody (Center) - Protein Information

Name LFNG

Function

Glycosyltransferase that initiates the elongation of O-linked fucose residues attached to EGF-like repeats in the extracellular domain of Notch molecules. Modulates NOTCH1 activity by modifying O-fucose residues at specific EGF-like domains resulting in inhibition of NOTCH1 activation by JAG1 and enhancement of NOTCH1 activation by DLL1 via an increase in its binding to DLL1 (By similarity). Decreases the binding of JAG1 to NOTCH2 but not that of DLL1 (PubMed: <http://www.uniprot.org/citations/11346656> target="_blank">11346656). Essential mediator of somite segmentation and patterning (By similarity).

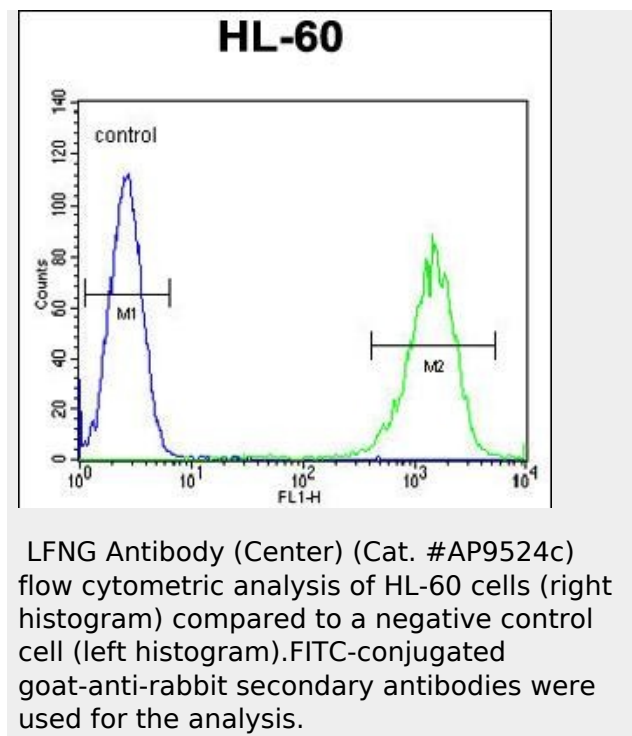
Cellular Location

Golgi apparatus membrane; Single-pass type II membrane protein

LFNG Antibody (Center) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



LFNG Antibody (Center) - Background

LFNG belongs to evolutionarily conserved glycosyltransferases that act in the Notch signaling pathway to define boundaries during embryonic development. While their genomic structure is distinct from other glycosyltransferases, fringe proteins have a fucose-specific beta-1,3-N-acetylglucosaminyltransferase activity that leads to elongation of O-linked fucose residues on Notch, which alters Notch signaling. This protein is predicted to be a single-pass type II Golgi membrane protein but it may also be secreted and proteolytically processed like the related proteins in mouse and Drosophila (PMID: 9187150).

LFNG Antibody (Center) - References

- Dunwoodie, S.L. *Biochim. Biophys. Acta* 1792(2):100-111(2009)
- Reedijk, M., et al. *Int. J. Oncol.* 33(6):1223-1229(2008)
- Sparrow, D.B., et al. *Am. J. Hum. Genet.* 78(1):28-37(2006)
- Cole, S.E., et al. *Dev. Cell* 3(1):75-84(2002)
- Moran, J.L., et al. *Mamm. Genome* 10(6):535-541(1999)