Product name:	Lunatic Fringe Rabbit Polyclonal Antibody
Cat number:	ABN13491
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human LFNG. AA range:121-170
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight:	42kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene is a member of the fringe gene family which also includes radical and manic fringe genes. They all encode 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 gene product 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). Mutations in this gene have been associated with autosomal recessive spondylocostal dysostosis 3. Multiple transcript variants encoding different isoformsalternative products:Experimental confirmation may be lacking for some isoforms,catalytic activity:Transfers a beta-D-GlcNAc residue from UDP-D-GlcNAc to the fucose residue of a fucosylated protein acceptor.,caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,disease:Defects in LFNG are the cause of spondylocostal dysostosis autosomal recessive type 3 (SCDO3) [MIM:609813]. Autosomal recessive spondylocostal dysostosis is a rare condition of variable severity associated with vertebral and rib segmentation defects. The main skeletal malformations include fusion of vertebrae, hemivertebrae, fusion of certain ribs, and other rib malformations. Deformity of the chest and spine (severe scoliosis, kyphoscoliosis and lordosis) is a natural consequence of the malformation and leads to a dwarf-like appearance. As the thorax is small, infants frequently have respiratory insufficiency and repeated respiratory infections resulting in life-threatening complications in the first year of life.,function:Glycosyltransferase that initiates the elongation of O-linked fucose residues attached to EGF-like repeats in the extracellular domain of Notch molecules. Decreases the binding of JAGGED1 to NOTCH2 but not that of DELTA1. Essential mediator of somite segmentation and patterning.,online information:Beta-1,3-N-acetylglucosaminyltransferase lunatic fringe,online information:GlycoGene database,PTM:A soluble form may be derived from the membrane form by proteolytic processing .,similarity:Belongs to the glycosyltransferase 31 family.,