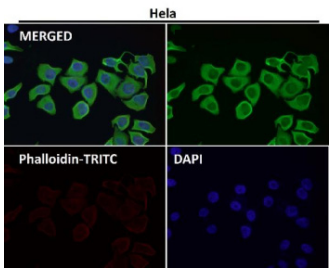
LFNG Antibody / Lunatic Fringe [clone 31L39] (FY12153)

Catalog No.	Formulation	Size
FY12153	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA	100 ul

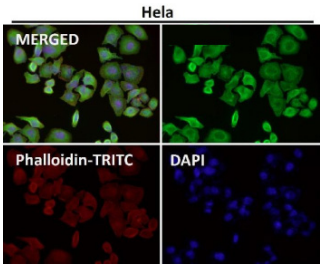
Recombinant RABBIT MONOCLONAL

Bulk quote request

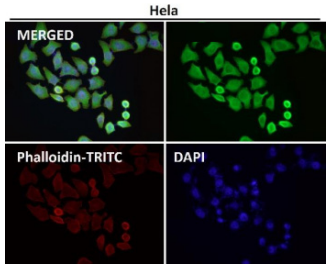
Availability	2-3 weeks
Species Reactivity	Human, Mouse, Rat
Format	Liquid
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	31L39
Purity	Affinity-chromatography
Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
UniProt	Q8NES3
Applications	Immunofluorescence : 1:50-1:200 Immunocytochemistry/Western Blot : 1:500-1:2000
Limitations	This LFNG antibody is available for research use only.



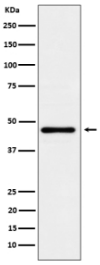
Immunofluorescent analysis using the LFNG antibody (green) at 1:150 dilution.



Immunofluorescent analysis using the LFNG antibody (green) at 1:50 dilution.



Immunofluorescent analysis using the LFNG antibody (green) at 1:500 dilution.



Western blot analysis of Lunatic Fringe expression in HeLa cell lysate using LFNG antibody.

Description

LFNG antibody detects lunatic fringe, a glycosyltransferase that modifies Notch receptors and regulates Notch signaling pathways. LFNG belongs to the fringe family of glycosyltransferases, which add N-acetylglucosamine residues to O-fucose on epidermal growth factor-like repeats of Notch. This modification alters ligand binding specificity and modulates signaling outcomes critical for development and tissue homeostasis.

Research using LFNG antibody has highlighted the protein's role in embryogenesis. LFNG is required for somitogenesis, the process that establishes segmented structures in the developing embryo. Loss of LFNG function leads to defects in somitic patterning and skeletal abnormalities, demonstrating its importance in developmental timing. Beyond embryonic segmentation, LFNG also contributes to hematopoiesis, vascular development, and neural differentiation by fine-tuning Notch signaling activity.

Dysregulation of LFNG has been implicated in cancer and congenital disorders. Aberrant expression of LFNG can lead to uncontrolled Notch signaling, a hallmark of various malignancies including breast cancer and T-cell acute lymphoblastic leukemia. Reduced LFNG activity may also contribute to congenital scoliosis and vertebral malformations. Understanding how LFNG modifies Notch receptors provides insights into therapeutic targeting of developmental and cancer-related pathways.

Antibodies against LFNG are validated for western blot, immunohistochemistry, and immunofluorescence. These tools enable researchers to study expression patterns in embryonic and adult tissues, as well as to evaluate changes in Notch pathway regulation. Clone-based antibodies ensure reliable detection of LFNG across experimental conditions.

NSJ Bioreagents provides this LFNG antibody for developmental biology, cancer, and signaling research.

Application Notes

Optimal dilution of the LFNG antibody should be determined by the researcher.

Immunogen

A synthesized peptide derived from human Lunatic Fringe was used as the immunogen for the LFNG antibody.

Storage

Store the LFNG antibody at -20oC.