

NHLRC1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13383c

Specification

NHLRC1 Antibody (Center) - Product Information

Application WB,E **Primary Accession** O6VVB1 Other Accession NP 940988.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 42293 Antigen Region 149-179

NHLRC1 Antibody (Center) - Additional Information

Gene ID 378884

Other Names

E3 ubiquitin-protein ligase NHLRC1, 632-, Malin, NHL repeat-containing protein 1, NHLRC1, EPM2B

Target/Specificity

This NHLRC1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 149-179 amino acids from the Central region of human NHLRC1.

Dilution

WB~~1:1000

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

NHLRC1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

NHLRC1 Antibody (Center) - Protein Information

Name NHLRC1

Synonyms EPM2B



Function E3 ubiquitin-protein ligase. Together with the phosphatase EPM2A/laforin, appears to be involved in the clearance of toxic polyglucosan and protein aggregates via multiple pathways. In complex with EPM2A/laforin and HSP70, suppresses the cellular toxicity of misfolded proteins by promoting their degradation through the ubiquitin-proteasome system (UPS). Ubiquitinates the glycogen-targeting protein phosphatase subunits PPP1R3C/PTG and PPP1R3D in a laforin-dependent manner and targets them for proteasome-dependent degradation, thus decreasing glycogen accumulation. Polyubiquitinates EPM2A/laforin and ubiquitinates AGL and targets them for proteasome-dependent degradation. Also promotes proteasome-independent protein degradation through the macroautophagy pathway.

Cellular Location

Endoplasmic reticulum. Nucleus. Note=Localizes at the endoplasmic reticulum and, to a lesser extent, in the nucleus

Tissue Location

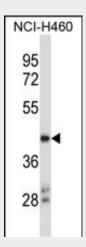
Expressed in brain, cerebellum, spinal cord, medulla, heart, liver, skeletal muscle and pancreas

NHLRC1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

NHLRC1 Antibody (Center) - Images



NHLRC1 Antibody (Center) (Cat. #AP13383c) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the NHLRC1 antibody detected the NHLRC1 protein (arrow).

NHLRC1 Antibody (Center) - Background

The protein encoded by this gene is a single subunit E3 ubiquitin ligase. Laforin is polyubiquitinated by the encoded protein. Defects in this intronless gene lead to an accumulation of





laforin and onset of Lafora disease, also known as progressive myoclonic epilepsy type 2 (EPM2).

NHLRC1 Antibody (Center) - References

Moreno, D., et al. Mol. Biol. Cell 21(15):2578-2588(2010) Rao, S.N., et al. J. Biol. Chem. 285(2):1404-1413(2010) Traore, M., et al. Neurogenetics 10(4):319-323(2009) Singh, S., et al. Hum. Mutat. 30(5):715-723(2009) Vernia, S., et al. PLoS ONE 4 (6), E5907 (2009) :