

ZNRF1 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16755c

Specification

ZNRF1 Antibody (Center) - Product Information

| | |
|-------------------|--|
| Application | WB,E |
| Primary Accession | Q8ND25 |
| Other Accession | Q91V17 , NP_115644.1 |
| Reactivity | Human |
| Predicted | Mouse |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Calculated MW | 23783 |
| Antigen Region | 59-86 |

ZNRF1 Antibody (Center) - Additional Information

Gene ID 84937

Other Names

E3 ubiquitin-protein ligase ZNRF1, 632-, Nerve injury-induced gene 283 protein, Zinc/RING finger protein 1, ZNRF1, NIN283

Target/Specificity

This ZNRF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 59-86 amino acids from the Central region of human ZNRF1.

Dilution

WB~~1:1000

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

ZNRF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

ZNRF1 Antibody (Center) - Protein Information

Name ZNRF1

Synonyms NIN283

Function E3 ubiquitin-protein ligase that plays a role in different processes including cell differentiation, receptor recycling or regulation of inflammation (PubMed:[28593998](#), PubMed:[33996800](#), PubMed:[37158982](#)). Mediates the ubiquitination of AKT1 and GLUL, thereby playing a role in neuron cells differentiation. Plays a role in the establishment and maintenance of neuronal transmission and plasticity. Regulates Schwann cells differentiation by mediating ubiquitination of GLUL. Promotes neurodegeneration by mediating 'Lys-48'-linked polyubiquitination and subsequent degradation of AKT1 in axons: degradation of AKT1 prevents AKT1-mediated phosphorylation of GSK3B, leading to GSK3B activation and phosphorylation of DPYSL2/CRMP2 followed by destabilization of microtubule assembly in axons. Ubiquitinates the Na(+)/K(+) ATPase alpha-1 subunit/ATP1A1 and thereby influences its endocytosis and/or degradation (PubMed:[22797923](#)). Controls ligand-induced EGFR signaling via mediating receptor ubiquitination and recruitment of the ESCRT machinery (PubMed:[33996800](#)). Acts as a negative feedback mechanism controlling TLR3 trafficking by mediating TLR3 'Lys-63'-linked polyubiquitination to reduce type I IFN production (PubMed:[37158982](#)). Modulates inflammation by promoting caveolin-1/CAV1 ubiquitination and degradation to regulate TLR4-activated immune response (PubMed:[28593998](#)).

Cellular Location

Endosome. Lysosome. Membrane; Peripheral membrane protein. Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane; Peripheral membrane protein Note=Associated with synaptic vesicle membranes in neurons

Tissue Location

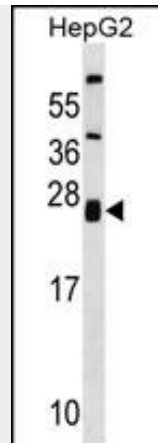
Expressed primarily in the nervous system, with expression higher in developing brain relative to adult. Expressed at low levels in testis and thymus.

ZNRF1 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](#)

ZNRF1 Antibody (Center) - Images



ZNRF1 Antibody (Center) (Cat. #AP16755c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the ZNRF1 antibody detected the ZNRF1 protein (arrow).

ZNRF1 Antibody (Center) - Background

In a study identifying genes in rat that are upregulated in response to nerve damage, a gene which is highly expressed in ganglia and in the central nervous system was found. The protein encoded by the rat gene contains both a zinc finger and a RING finger motif and is localized in the endosome/lysosome compartment, indicating that it may be involved in ubiquitin-mediated protein modification. The protein encoded by this human gene is highly similar in sequence to that encoded by the rat gene. [provided by RefSeq].

ZNRF1 Antibody (Center) - References

- Dastani, Z., et al. Eur. J. Hum. Genet. 18(3):342-347(2010)
- Yoshida, K., et al. Biochem. Biophys. Res. Commun. 389(3):506-511(2009)
- Markson, G., et al. Genome Res. 19(10):1905-1911(2009)
- van Wijk, S.J., et al. Mol. Syst. Biol. 5, 295 (2009) :
- Araki, T., et al. J. Neurosci. 23(28):9385-9394(2003)