

ZNRF1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP16755c**Specification**

ZNRF1 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q8ND25](#)**ZNRF1 Antibody (Center) Blocking Peptide - 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

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

ZNRF1 Antibody (Center) Blocking Peptide - 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](http://www.uniprot.org/citations/28593998), PubMed: [33996800](http://www.uniprot.org/citations/33996800), PubMed: [37158982](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

ZNRF1 Antibody (Center) Blocking Peptide - Images

ZNRF1 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)