

Anti-N4WBP5 Antibody

Rabbit polyclonal antibody to N4WBP5 Catalog # AP61017

Specification

Anti-N4WBP5 Antibody - Product Information

Application WB
Primary Accession Q9BT67
Other Accession Q8R0W6

Reactivity Human, Mouse, Rat

Host Rabbit Clonality Polyclonal Calculated MW 24899

Anti-N4WBP5 Antibody - Additional Information

Gene ID 80762

Other Names

N4WBP5; NEDD4 family-interacting protein 1; Breast cancer-associated protein SGA-1M; NEDD4 WW domain-binding protein 5; Putative MAPK-activating protein PM13; Putative NF-kappa-B-activating protein 164; Putative NFKB and MAPK-activating protein

Target/Specificity

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human N4WBP5. The exact sequence is proprietary.

Dilution

WB~~WB (1/500 - 1/1000)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-N4WBP5 Antibody - Protein Information

Name NDFIP1

Synonyms N4WBP5

Function

Activates HECT domain-containing E3 ubiquitin-protein ligases, including NEDD4 and ITCH, and consequently modulates the stability of their targets. As a result, controls many cellular processes. Prevents chronic T-helper cell-mediated inflammation by activating ITCH and thus controlling JUNB degradation (By similarity). Promotes pancreatic beta cell death through degradation of JUNB and



Tel: 858.875.1900 Fax: 858.875.1999

inhibition of the unfolded protein response, leading to reduction of insulin secretion (PubMed: 26319551). Restricts the production of pro- inflammatory cytokines in effector Th17 T-cells by promoting ITCH- mediated ubiquitination and degradation of RORC (By similarity). Together with NDFIP2, limits the cytokine signaling and expansion of effector Th2 T-cells by promoting degradation of JAK1, probably by ITCH- and NEDD4L-mediated ubiquitination (By similarity). Regulates peripheral T-cell tolerance to self and foreign antigens, forcing the exit of naive CD4+ T-cells from the cell cycle before they become effector T-cells (By similarity). Negatively regulates RLR-mediated antiviral response by promoting SMURF1-mediated ubiquitination and subsequent degradation of MAVS (PubMed:23087404). Negatively regulates KCNH2 potassium channel activity by decreasing its cell-surface expression and interfering with channel maturation through recruitment of NEDD4L to the Golgi apparatus where it mediates KCNH2 degradation (PubMed:26363003). In cortical neurons, mediates the ubiquitination of the divalent metal transporter SLC11A2/DMT1 by NEDD4L, leading to its down-regulation and protection of the cells from cobalt and iron toxicity (PubMed:19706893). Important for normal development of dendrites and dendritic spines in cortex (By similarity). Enhances the ubiquitination of BRAT1 mediated by: NEDD4, NEDD4L and ITCH and is required for the nuclear localization of ubiquitinated BRAT1 (PubMed:25631046). Enhances the ITCH-mediated ubiquitination of MAP3K7 by recruiting E2 ubiquitin-conjugating enzyme UBE2L3 to ITCH (By similarity). Modulates EGFR signaling through multiple pathways. In particular, may regulate the ratio of AKT1-to-MAPK8 signaling in response to EGF, acting on AKT1 probably through PTEN destabilization and on MAPK8 through ITCH-dependent MAP2K4 inactivation. As a result, may control cell growth rate (PubMed:20534535). Inhibits cell proliferation by promoting PTEN nuclear localization and changing its signaling specificity (PubMed:25801959).

Cellular Location

Endosome membrane; Multi-pass membrane protein. Golgi apparatus membrane. Synapse, synaptosome {ECO:0000250|UniProtKB:Q8R0W6}. Cell projection, dendrite {ECO:0000250|UniProtKB:Q5U2S1}. Secreted Note=Detected in exosomes and secreted via the exosomal pathway (PubMed:18819914)

Tissue Location

Widely expressed. Higher levels are detected in cerebellum, pituitary, thalamus, kidney, liver, testis, salivary glands and placenta. Also expressed in fetal brain, kidney and lung

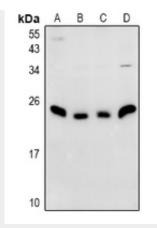
Anti-N4WBP5 Antibody - Protocols

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

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

Anti-N4WBP5 Antibody - Images





Western blot analysis of N4WBP5 expression in C6 (A), AML12 (B), HepG2 (C), HEK293T (D) whole cell lysates.

Anti-N4WBP5 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human N4WBP5. The exact sequence is proprietary.