Anti-Ndfip1 antibody

Description	Rabbit polyclonal to Ndfip1.

Model	STJ94367
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, WB
Immunogen	Synthesized peptide derived from human Ndfip1
Immunogen Region	150-230 aa, C-terminal
Gene ID	80762
Gene Symbol	NDFIP1
Dilution range	WB 1:500-1:2000ELISA 1:40000
Specificity	Ndfip1 Polyclonal Antibody detects endogenous levels of Ndfip1 protein.
Tissue Specificity	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.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	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 p

Molecular Weight	25 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:17592OMIM:612050
Alternative Names	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 p
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 . Promotes pancreatic beta cell death through degradation of JUNB and inhibition of the unfolded protein response, leading to reduction of insulin secretion . Restricts the production of proinflammatory cytokines in effector Th17 T-cells by promoting ITCH-mediated ubiquitination and degradation of RORC . 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 . 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 . Negatively regulates RLR-mediated antiviral response by promoting SMURF1-mediated ubiquitination and subsequent degradation of MAVS . 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 . 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 . Important for normal development of dendrites and dendritic spines in cortex . Enhances the ubiquitination of BRAT1 mediated by: NEDD4, NEDD4L and ITCH and is required for the nuclear localization of ubiquitinated BRAT1 . Enhances the ITCH-mediated ubiquitination of MAP3K7 by recruiting E2 ubiquitin-conjugating enzyme UBE2L3 to ITCH . 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 . Inhibits cell proliferation by promoting PTEN nuclear localization and changing its signaling specificity .
Sequence and Domain Family	The PY/WW-binding motifs are required for E3 ubiquitin-protein ligase binding and activation and for ubiquitination.
Cellular Localization	Endosome membrane Golgi apparatus membrane Cell junction, synapse,

	synaptosome Cell projection, dendrite Secreted. Detected in exosomes and secreted via the exosomal pathway .
Post-translational Modifications	Ubiquitinated by NEDD4 and ITCH; mono-, di- and polyubiquitinated forms are detected. Ubiquitination regulates its degradation. Undergoes transient tyrosine phosphorylation following EGF stimulation, most probably by catalyzed by SRC. Phosphorylation SRC is enhanced in the presence of NDFIP2 which may act as a scaffold to recruit SRC to NDFIP1.