

**NDFIP2 Polyclonal Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP57376****Specification****NDFIP2 Polyclonal Antibody - Product Information**

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	<a href="#">Q9NV92</a>
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	36 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human NDFIP2
Epitope Specificity	261-336/336
Isotype	IgG
<b>Purity</b>	
affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Endosome membrane. Golgi apparatus membrane. Endosome > multivesicular body membrane.
SUBUNIT	Forms heterodimers with NDFIP1. Interacts with HECT domain-containing E3 ubiquitin-protein ligases, including NEDD4. Interacts with NEDD4L By similarity. Interacts with PTEN. When phosphorylated at Tyr-167, interacts with SRC and LYN SH2 domain. May thus act as a scaffold that recruits SRC to NDFIP1, enhancing NDFIP1 phosphorylation. Interacts with SLC11A2/DMT1. May interact with phosphorylated EGFR.
Post-translational modifications	Ubiquitinated by NEDD4 and ITCH. Also ubiquitinated by NEDD4L. Ubiquitination by NEDD4 or NEDD4L does not affect turnover. Undergoes transient tyrosine-phosphorylation following EGF stimulation, most probably catalyzed by SRC. Also phosphorylated by LYN and FYN.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

NDFIP2 is a 336 amino acid protein that localizes to the membrane of both the endosome and the golgi apparatus. Expressed in kidney, heart, brain, lung, liver, placenta and skeletal muscle, Ndfip2 interacts with NEDD4 and NEDD4-L and is thought to be involved in endocytosis and in the NFxB and MAPK signaling pathways. Additionally, Ndfip2 may function as an adaptor protein that may

recruit NEDD4 ubiquitin-protein ligases to protein trafficking machinery in the golgi. Ndfip2 is activated by T cells and may be ubiquitinated by NEDD4 or NEDD4-L, an event that does not affect Ndfip2 function. The gene encoding Ndfip2 maps to human chromosome 13, which houses over 400 genes, such as BRCA2 and RB1, and comprises nearly 4% of the human genome.

## **NDFIP2 Polyclonal Antibody - Additional Information**

**Gene ID** 54602

### **Other Names**

NEDD4 family-interacting protein 2, NEDD4 WW domain-binding protein 5A, Putative MAPK-activating protein PM04/PM05/PM06/PM07, Putative NF-kappa-B-activating protein 413, NDFIP2, KIAA1165, N4WBP5A

### **Target/Specificity**

Expressed in brain, lung, heart, skeletal muscle, kidney, liver and placenta.

### **Dilution**

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_E">E~~N/A</span>

### **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

### **Storage**

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

## **NDFIP2 Polyclonal Antibody - Protein Information**

**Name** NDFIP2

**Synonyms** KIAA1165, N4WBP5A

### **Function**

Activates HECT domain-containing E3 ubiquitin-protein ligases, including ITCH, NEDD4, NEDD4L, SMURF2, WWP1 and WWP2, and consequently modulates the stability of their targets. As a result, may control many cellular processes. Recruits ITCH, NEDD4 and SMURF2 to endosomal membranes. 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 and multivesicular body where it mediates KCNH2 degradation (PubMed:<a href="http://www.uniprot.org/citations/26363003" target="\_blank">26363003</a>). May modulate EGFR signaling. Together with NDFIP1, 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).

### **Cellular Location**

Endosome membrane; Multi-pass membrane protein. Golgi apparatus membrane. Endosome, multivesicular body membrane

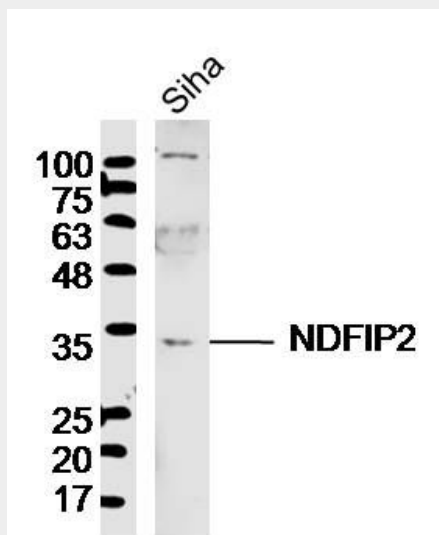
**Tissue Location**

Expressed in brain, lung, heart, skeletal muscle, kidney, liver and placenta.

**NDFIP2 Polyclonal Antibody - 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](#)

**NDFIP2 Polyclonal Antibody - Images**

Sample: Siha Cell (Human) Lysate at 40 ug  
Primary: Anti- NDFIP2 (bs-19059R) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 36 kD  
Observed band size: 34 kD