

NEDD 4-2

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Cat.No. 283 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 μg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 μ l H $_2$ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1: 1000 (AP staining) IP: not tested yet ICC: not tested yet IHC: not tested yet IHC-P/FFPE: not tested yet
Immunogen	Recombinant protein corresponding to AA 256 to 414 from mouse NEDD4-2 (UniProt Id: Q8CFI0)
Reactivity	Reacts with: rat (Q62940), mouse (P46935). Other species not tested yet.
Specificity	Specific for Nedd 4-2 (K.O. verified)

TO BE USED IN VITRO / FOR RESEARCH ONLY NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Nedd 4-1 (RFP 1) and its close relative **Nedd 4-2** (NEDD4L) are involved in the ubiquitination of cell surface receptores triggering their internalization and subsequent degradation.

Nedd 4-1 belongs to the most abundant E3 ubiquitin ligases in mammalian neurons. One important target for Nedd 4-1 is Rap2A a protein involved in dendrite formation.

One important target for Nedd 4-2 is the amiloride-sensitive epithelial sodium channel (ENaC) which is involved in fluid and electrolyte homeostasis.

Selected General References

Respiratory distress and perinatal lethality in Nedd4-2-deficient mice.

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Nedd4-2 isoforms ubiquitinate individual epithelial sodium channel subunits and reduce surface expression and function of the epithelial sodium channel.

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Epithelial sodium channel (ENaC) is multi-ubiquitinated at the cell surface.

Wiemuth D, Ke Y, Rohlfs M, McDonald FJ

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The role of Nedd4/Nedd4-like dependant ubiquitylation in epithelial transport processes.

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A novel mouse Nedd4 protein suppresses the activity of the epithelial Na+ channel.

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