

Anti-NEURL1 Antibody

Catalog # AP51384

Product Information

Application	WB, IHC, IF/IC
Primary Accession	O76050
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	61860

Additional Information

Gene ID	9148
Other Names	NEURL; NEURL1A; RNF67; E3 ubiquitin-protein ligase NEURL1; Neuralized-like protein 1A; h-neu; h-neuralized 1; RING finger protein 67
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human NEURL1. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	NEURL1
Synonyms	NEURL, NEURL1A, RNF67
Function	Plays a role in hippocampal-dependent synaptic plasticity, learning and memory. Involved in the formation of spines and functional synaptic contacts by modulating the translational activity of the cytoplasmic polyadenylation element-binding protein CPEB3. Promotes ubiquitination of CPEB3, and hence induces CPEB3-dependent mRNA translation activation of glutamate receptor GRIA1 and GRIA2. Can function as an E3 ubiquitin-protein ligase to activate monoubiquitination of JAG1 (in vitro), thereby regulating the Notch pathway. Acts as a tumor suppressor; inhibits malignant cell transformation of medulloblastoma (MB) cells by inhibiting the Notch signaling pathway.
Cellular Location	Cytoplasm, perinuclear region. Cell membrane; Peripheral membrane protein Perikaryon. Cell projection, dendrite Postsynaptic density. Note=Localized in the cell bodies of the pyramidal neurons and distributed along their apical

dendrites Colocalized with PSD95 in postsynaptic sites. Colocalized with CPEB3 at apical dendrites of CA1 neurons (By similarity). Colocalized with JAG1 at the cell surface.

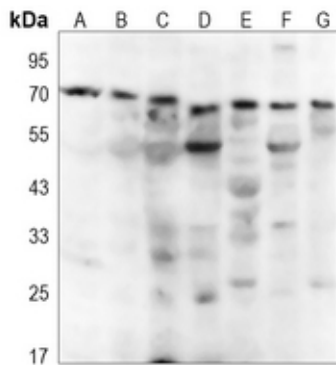
Tissue Location

Expressed in brain, testis, pituitary gland, pancreas and bone marrow. Also poorly expressed in malignant astrocytomas and several neuroectodermal tumor cell lines. Weakly expressed in medulloblastoma (MB) compared with normal cerebellar tissues.

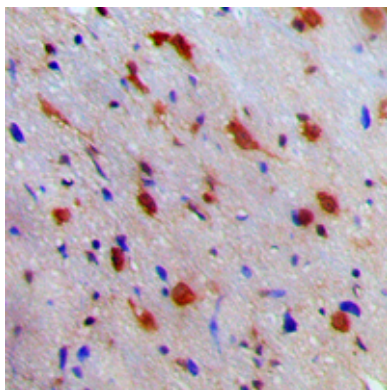
References

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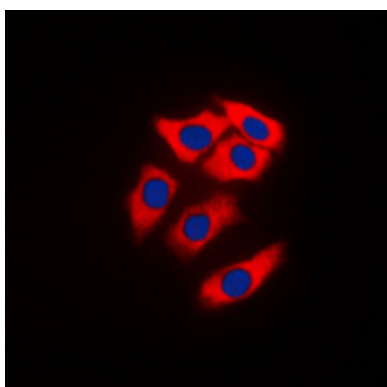
Images



Western blot analysis of NEURL1 expression in HEK293T (A), MCF7 (B), mouse brain (C), mouse muscle (D), rat brain (E), rat muscle (F) whole cell lysates. (Predicted band size: 61 kDa; Observed band size: 62 kDa)



Immunohistochemical analysis of NEURL1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of NEURL1 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark. DAPI was used to stain the cell nuclei (blue).

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