

IL1RAPL1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP54197

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9NZN1
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	79969
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human IL1RAPL1
Epitope Specificity	301-400/696
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane. Cytoplasm. May localize to the cell body and growth cones of dendrite-like processes.
SIMILARITY	Belongs to the interleukin-1 receptor family. Contains 3 Ig-like C2-type (immunoglobulin-like) domains. Contains 1 TIR domain.
DISEASE	Defects in IL1RAPL1 are the cause of mental retardation X-linked type 21 (MRX21) [MIM:300143]. Mental retardation is a mental disorder characterized by significantly sub-average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. Non-syndromic mental retardation patients do not manifest other clinical signs.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The protein encoded by this gene is a member of the interleukin 1 receptor family and is similar to the interleukin 1 accessory proteins. It is most closely related to interleukin 1 receptor accessory protein-like 2 (IL1RAPL2). This gene and IL1RAPL2 are located at a region on chromosome X that is associated with X-linked non-syndromic mental retardation. Deletions and mutations in this gene were found in patients with mental retardation. This gene is expressed at a high level in post-natal brain structures involved in the hippocampal memory system, which suggests a specialized role in the physiological processes underlying memory and learning abilities.

Additional Information

Gene ID	11141
Other Names	Interleukin-1 receptor accessory protein-like 1, IL-1-RAPL-1, IL-1RAPL-1, IL1RAPL-1, 3.2.2.6 {ECO:0000255 PROSITE-ProRule:PRU00204}, Oligophrenin-4, Three immunoglobulin domain-containing IL-1

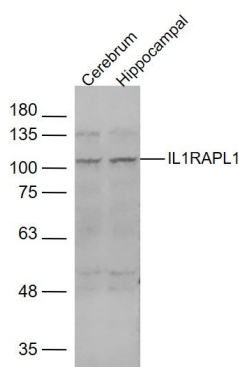
receptor-related 2, TIGIRR-2, X-linked interleukin-1 receptor accessory protein-like 1, IL1RAPL1, OPHN4

Target/Specificity	Detected at low levels in heart, skeletal muscle, ovary, skin, amygdala, caudate nucleus, corpus callosum, hippocampus, substantia nigra and thalamus. Detected at very low levels in tonsil, prostate, testis, small intestine, placenta, colon and fetal liver.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1 µg/Test,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 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.

Protein Information

Name	IL1RAPL1
Synonyms	OPHN4
Function	May regulate secretion and presynaptic differentiation through inhibition of the activity of N-type voltage-gated calcium channel (PubMed: 12783849). May activate the MAP kinase JNK (PubMed: 15123616). Plays a role in neurite outgrowth (By similarity). During dendritic spine formation can bidirectionally induce pre- and post-synaptic differentiation of neurons by trans-synaptically binding to PTPRD (By similarity).
Cellular Location	Cell membrane; Single-pass type I membrane protein Cytoplasm. Cell projection, axon. Cell projection, dendrite. Note=May localize to the cell body and growth cones of dendrite-like processes
Tissue Location	Detected at low levels in heart, skeletal muscle, ovary, skin, amygdala, caudate nucleus, corpus callosum, hippocampus, substantia nigra and thalamus. Detected at very low levels in tonsil, prostate, testis, small intestine, placenta, colon and fetal liver

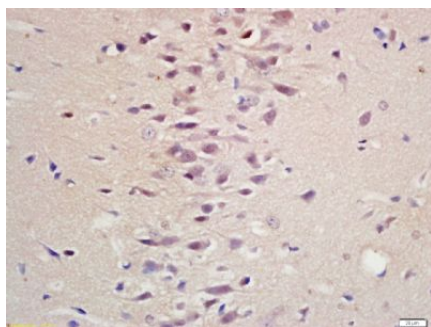
Images



Sample:

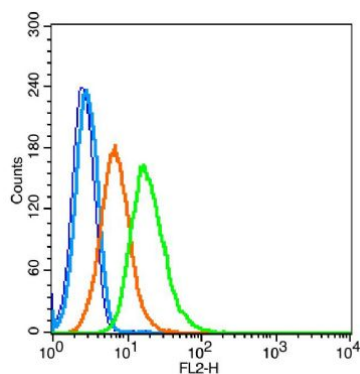
Cerebrum (Mouse) Lysate at 40 ug
Hippocampal (Mouse) Lysate at 40 ug
Primary: Anti-IL1RAPL1 (AP54197) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 78 kD
Observed band size: 108 kD

Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;



Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-IL1RAPL1 Polyclonal Antibody, Unconjugated(AP54197) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control:TM4(blue).

Primary Antibody: Rabbit Anti-IL1RAPL1 antibody(AP54197), Dilution: 1 µg in 100 µL 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG (orange) ,used under the same conditions.

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

Protocol

Primary antibody (AP54197,1 µg /1x10⁶ cells) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned above to react with the primary antibody at 1/200 dilution for 30 min on ice. Acquisition of 20,000 events was performed.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.