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AKIRIN1 Rabbit pAb

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Catalog # AP59134

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9H9L7
Reactivity	Rat
Predicted	Human, Mouse, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21867
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human AKIRIN1
Epitope Specificity	101-192/192
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	Nuclear
SIMILARITY	Belongs to the akirin family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	AKIRIN1 is dispensable in the mouse, and neither knockout mice nor cells derived from them have obvious distinctive phenotypes. In contrast, Akirin2 is required for development in the mouse and knockout of both Akirin homologs in mice show that Akirin2 is required downstream of toll-like receptor (TLR), TNF-alpha and IL-1beta signaling, and for the production of IL-6. Akirin2 is functionally closer to the single gene in Drosophila, as the homozygous null D. melanogaster Akirin mutants show a similar, mid-to-early embryonic death.The highly conserved, nuclear-localized AKIRIN1 and Akirin2 proteins critically regulate the transcription of NF-kB dependent genes and are required for defense against Gram-negative bacteria in the immune deficiency and NF-kB pathways.

Additional Information

Gene ID	79647
Other Names	Akirin-1, AKIRIN1 {ECO:0000303|PubMed:18066067, ECO:0000312|HGNC:HGNC:25744}
Target/Specificity	Widely expressed with the highest expression in heart, liver, placenta and peripheral blood leukocytes.
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

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.

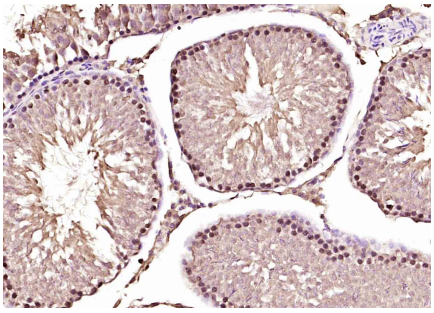
Protein Information

Name	AKIRIN1 {ECO:0000303|PubMed:18066067, ECO:0000312|HGNC:HGNC:25744}
Function	Molecular adapter that acts as a bridge between proteins, and which is involved skeletal muscle development (By similarity). Functions as a signal transducer for MSTN during skeletal muscle regeneration and myogenesis (By similarity). May regulate chemotaxis of both macrophages and myoblasts by reorganising actin cytoskeleton, leading to more efficient lamellipodia formation via a PI3 kinase dependent pathway (By similarity). In contrast to AKIRIN2, not involved in nuclear import of proteasomes (PubMed:34711951).
Cellular Location	Nucleus.
Tissue Location	Widely expressed with the highest expression in heart, liver, placenta and peripheral blood leukocytes

Background

AKIRIN1 is dispensable in the mouse, and neither knockout mice nor cells derived from them have obvious distinctive phenotypes. In contrast, Akirin2 is required for development in the mouse and knockout of both Akirin homologs in mice show that Akirin2 is required downstream of toll-like receptor (TLR), TNF-alpha and IL-1beta signaling, and for the production of IL-6. Akirin2 is functionally closer to the single gene in Drosophila, as the homozygous null D. melanogaster Akirin mutants show a similar, mid-to-early embryonic death.The highly conserved, nuclear-localized AKIRIN1 and Akirin2 proteins critically regulate the transcription of NF-kB dependent genes and are required for defense against Gram-negative bacteria in the immune deficiency and NF-kB pathways.

Images



Paraformaldehyde-fixed, paraffin embedded (rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (AKIRIN1) Polyclonal Antibody, Unconjugated (AP59134) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.