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Akirin1 Antibody

Catalog # ASC10765

Product Information

Application	WB, E
Primary Accession	Q9H9L7
Other Accession	CAI16710, 55962136
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	21867
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Akirin1 antibody can be used for detection of Akirin1 by Western blot at 1 - 2 g/mL.

Additional Information

Gene ID	79647
Other Names	Akirin-1, AKIRIN1, C1orf108
Target/Specificity	AKIRIN1;
Reconstitution & Storage	Akirin1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Akirin1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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

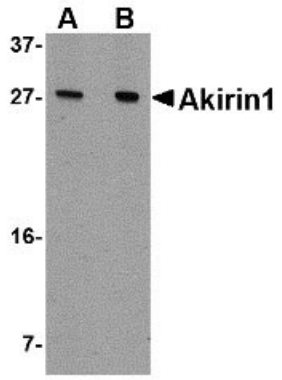
Background

Akirin1 Antibody: The highly conserved, nuclear-localized Akirin1 and Akirin2 proteins critically regulate the transcription of NF-κB-dependent genes and are required for defense against Gram-negative bacteria in the immune deficiency and NF-κB pathways. 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-α and IL-1β 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.

References

Goto A, Matsushita K, Gesellchen V, et al. Akirins are highly conserved nuclear proteins required for NF-kappaB-dependent gene expression in drosophila and mice. Nat. Immunol.2008; 9:97-104.
Beutler B and Moresco EM. Akirins versus infection. Nat. Immunol.2008; 9:7-9.
Sutterwala FS and Flavell RA. Immunology: cascade into clarity. Nature2008; 451:254-5.
Tanji T and Ip YT. Regulators of the Toll and Imd pathways in the Drosophila innate immune response. Trends Immunol.2005; 26:193-8.

Images



Western blot analysis of Akirin1 in A549 cell lysate with Akirin1 antibody at (A) 1 and (B) 2 µg/mL.

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