10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Akirin1 Antibody
Catalog # ASC10766

Specification

Akirin1 Antibody - Product Information

Application	**IF**
Primary Accession	Q9H9L7
Other Accession	CAI16710, 79647
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**Akirin1 antibody can be used for detection of Akirin1 by Western blot at 1 - 2 µg/mL.**

Akirin1 Antibody - Additional Information

Gene ID **79647**

Target/Specificity
Akirin1 antibody was raised against a 14 amino acid synthetic peptide near the center of the human Akirin1.

The immunogen is located within amino acids 40 - 90 of 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.

Akirin1 Antibody - 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

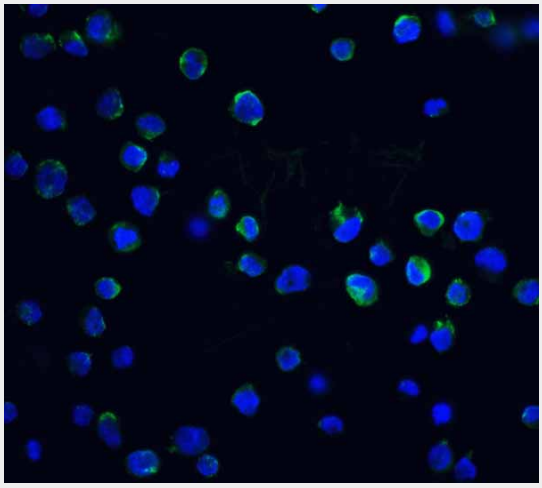
leukocytes

Akirin1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Akirin1 Antibody - Images



Immunofluorescence of DFF40 in K562 cells with DFF40 antibody at 20 µg/ml.

Akirin1 Antibody - 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.

Akirin1 Antibody - 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.