

Akirin1 Antibody

Akirin1 (IN): Chromosome 1 Open Reading Frame 108, C1orf108, STRF2

CATALOG No.: 4801

BACKGROUND:

The highly conserved, nuclear-localized Akirin1 and Akirin2 proteins critically regulate the transcription of NF- κ B-dependent genes and are required for defense against Gram-negative bacteria in the immune deficiency and NF- κ B pathways (1). 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-1 β 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 (2-4).

SOURCE:

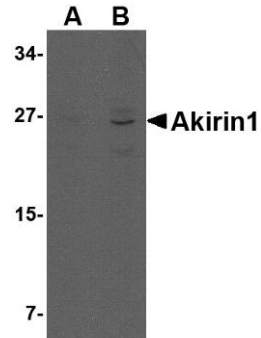
Rabbit polyclonal Akirin1 antibody was raised against a 14 amino acid peptide near the center of the human Akirin1 (GenBank accession no. CAI16710).

APPLICATION:

Akirin1 antibody can be used for detection of Akirin1 by Western blot at 1 – 2 μ g/ml. (Optimal dilution should be determined by user.) Rat liver tissue lysate can be used as positive control. Akirin1 antibody is human, mouse and rat reactive. **For research use only.**

STORAGE:

Akirin1 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of Akirin1 in rat liver lysate with Akirin1 antibody at (A) 1 and (B) 2 μ g/ml.

RELATED PRODUCTS:

Blocking Peptide, Catalog No. **4801P**.
Rat Liver Tissue Lysate, Catalog No. **1464**.
Akirin1 Antibody (NT), Catalog No. **4799**.
Akirin2 Antibody (IN1), Catalog No. **4803**.
Akirin2 Antibody (IN2), Catalog No. **4805**.
TLR detection Set, Catalog No. **PSI-1806**.

REFERENCES:

1. 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.
2. Beutler B and Moresco EM. Akirins versus infection. *Nat. Immunol.* 2008; 9:7-9.
3. Sutterwala FS and Flavell RA. Immunology: cascade into clarity. *Nature* 2008; 451:254-5.
4. Tanji T and Ip YT. Regulators of the Toll and Imd pathways in the *Drosophila* innate immune response. *Trends Immunol.* 2005; 26:193-8. (08-01D)