

**AKIR1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17755b****Specification**

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**AKIR1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q9H9L7](#)**AKIR1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 79647**Other Names**

Akinin-1, AKIRIN1, C1orf108

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**AKIR1 Antibody (C-term) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/34711951" target="\_blank">34711951</a>).

**Cellular Location**

Nucleus.

**Tissue Location**

Widely expressed with the highest expression in heart, liver, placenta and peripheral blood leukocytes

**AKIR1 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

#### **AKIR1 Antibody (C-term) Blocking Peptide - Images**

#### **AKIR1 Antibody (C-term) Blocking Peptide - Background**

The highly conserved, nuclear-localized AKIRIN1 and Akirin2 proteins critically regulate the transcription of NF- $\kappa$ B dependent genes and are required for defense against Gram-negative bacteria in the immune deficiency and NF- $\kappa$ B 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- $\alpha$  and IL-1 $\beta$  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.

#### **AKIR1 Antibody (C-term) Blocking Peptide - References**

Goto, A., et al. Nat. Immunol. 9(1):97-104(2008)