

**SPIRE1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP17465b****Specification**

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**SPIRE1 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [Q08AE8](#)**SPIRE1 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 56907

**Other Names**

Protein spire homolog 1, Spir-1, SPIRE1 {ECO:0000312|EMBL:AAI252071}, KIAA1135, SPIR1

**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.

**SPIRE1 Antibody (C-term) Blocking Peptide - Protein Information**

Name SPIRE1 {ECO:0000312|EMBL:AAI25207.1}

Synonyms KIAA1135, SPIR1

**Function**

Acts as an actin nucleation factor, remains associated with the slow-growing pointed end of the new filament (PubMed:<a href="http://www.uniprot.org/citations/11747823" target="\_blank">11747823</a>, PubMed:<a href="http://www.uniprot.org/citations/21620703" target="\_blank">21620703</a>). Involved in intracellular vesicle transport along actin fibers, providing a novel link between actin cytoskeleton dynamics and intracellular transport (PubMed:<a href="http://www.uniprot.org/citations/11747823" target="\_blank">11747823</a>). Required for asymmetric spindle positioning and asymmetric cell division during meiosis (PubMed:<a href="http://www.uniprot.org/citations/21620703" target="\_blank">21620703</a>). Required for normal formation of the cleavage furrow and for polar body extrusion during female germ cell meiosis (PubMed:<a href="http://www.uniprot.org/citations/21620703" target="\_blank">21620703</a>). Also acts in the nucleus: together with FMN2, promotes assembly of nuclear actin filaments in response to DNA damage in order to facilitate movement of chromatin and repair factors after DNA damage (PubMed:<a href="http://www.uniprot.org/citations/26287480" target="\_blank">26287480</a>). In addition, promotes innate immune signaling downstream of dsRNA sensing (PubMed:<a href="http://www.uniprot.org/citations/35148361" target="\_blank">35148361</a>).

Mechanistically, contributes to IRF3 phosphorylation and activation downstream of MAVS and upstream of TBK1 (PubMed: <a href="http://www.uniprot.org/citations/35148361" target="\_blank">35148361</a>).

**Cellular Location**

Cytoplasm, cytoskeleton. Cytoplasm, perinuclear region. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q52KF3}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q52KF3}; Cytoplasmic side {ECO:0000250|UniProtKB:Q52KF3}. Note=Detected at the cleavage furrow during asymmetric oocyte division and polar body extrusion (By similarity). Punctate spots in perinuclear region and cytoplasm, colocalized with Rab11 (By similarity). {ECO:0000250|UniProtKB:Q52KF3}

**SPIRE1 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**SPIRE1 Antibody (C-term) Blocking Peptide - Images****SPIRE1 Antibody (C-term) Blocking Peptide - Background**

Spire proteins, such as SPIRE1, are highly conserved between species. They belong to the family of Wiskott-Aldrich homology region-2 (WH2) proteins, which are involved in actin organization (Kerkhoff et al., 2001 [PubMed 11747823]). [supplied by OMIM].

**SPIRE1 Antibody (C-term) Blocking Peptide - References**

Rose, J. Phd, et al. Mol. Med. (2010) In press : Pechlivanis, M., et al. J. Biol. Chem. 284(37):25324-25333(2009) Bosch, M., et al. Mol. Cell 28(4):555-568(2007) Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) : Kerkhoff, E., et al. Curr. Biol. 11(24):1963-1968(2001)