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SPIRE1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP17465b

Specification

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:11747823, PubMed:21620703). Involved in intracellular vesicle transport along actin fibers, providing a novel link between actin cytoskeleton dynamics and intracellular transport (PubMed:11747823). Required for asymmetric spindle positioning and asymmetric cell division during meiosis (PubMed:21620703). Required for normal formation of the cleavage furrow and for polar body extrusion during female germ cell meiosis (PubMed:21620703). 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:26287480). In addition, promotes innate immune signaling downstream of dsRNA sensing (PubMed:35148361).

Mechanistically, contributes to IRF3 phosphorylation and activation downstream of MAVS and upstream of TBK1 (PubMed:35148361).

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 conservedbetween species. They belong to the family of Wiskott-Aldrichhomology region-2 (WH2) proteins, which are involved in actinorganization (Kerkhoff et al., 2001 [PubMed 11747823]).[supplied byOMIM].

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)