

SPIRE1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17465b

Specification

SPIRE1 Antibody (C-term) - Product Information

Application WB,E
Primary Accession Q08AE8

Other Accession <u>Q52KF3</u>, <u>Q4R707</u>, <u>NP 001122099.1</u>,

NP 001122098.1

Reactivity Human

Predicted Monkey, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 85544
Antigen Region 665-691

SPIRE1 Antibody (C-term) - Additional Information

Gene ID 56907

Other Names

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

Target/Specificity

This SPIRE1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 665-691 amino acids from the C-terminal region of human SPIRE1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

SPIRE1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SPIRE1 Antibody (C-term) - 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

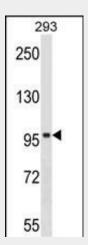
Cytoplasm, cytoskeleton. Cytoplasm, perinuclear region. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q52KF3}; Peripheral membrane protein {ECO:0000250|UniProtKB:Q52KF3}; Cytoplasmic side {ECO:0000250|UniProtKB:Q52KF3}. Note=Detected 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) - 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

SPIRE1 Antibody (C-term) - Images



SPIRE1 Antibody (C-term) (Cat. #AP17465b) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the SPIRE1 antibody detected the SPIRE1 protein (arrow).



SPIRE1 Antibody (C-term) - 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) - 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)