

AKNA Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP5317a

Specification

AKNA Antibody (N-term) Blocking peptide - Product Information

Primary Accession
Other Accession

[Q7Z591](#)
[NP_110394.3](#)

AKNA Antibody (N-term) Blocking peptide - Additional Information

Gene ID 80709

Other Names

AT-hook-containing transcription factor, AKNA, KIAA1968

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.

AKNA Antibody (N-term) Blocking peptide - Protein Information

Name AKNA {ECO:0000303|PubMed:15869410, ECO:0000312|HGNC:HGNC:24108}

Function

Centrosomal protein that plays a key role in cell delamination by regulating microtubule organization (By similarity). Required for the delamination and retention of neural stem cells from the subventricular zone during neurogenesis (By similarity). Also regulates the epithelial-to-mesenchymal transition in other epithelial cells (By similarity). Acts by increasing centrosomal microtubule nucleation and recruiting nucleation factors and minus-end stabilizers, thereby destabilizing microtubules at the adherens junctions and mediating constriction of the apical endfoot (By similarity). In addition, may also act as a transcription factor that specifically activates the expression of the CD40 receptor and its ligand CD40L/CD154, two cell surface molecules on lymphocytes that are critical for antigen-dependent-B-cell development (PubMed:11268217). Binds to A/T-rich promoters (PubMed:11268217). It is unclear how it can both act as a microtubule organizer and as a transcription factor; additional evidences are required to reconcile these two apparently contradictory functions (Probable).

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole

{ECO:0000250|UniProtKB:Q80VW7}. Nucleus. Note=Localizes to the distal part of the subdistal appendages of the mother centriole in interphase. Also found at the proximal ends of centrioles and along microtubules. The centrosomal localization is dependent on centrioles. Dissociates from centrosomes during M-phase without proteolytic degradation and reassembles at the centrosomes during late telophase and early G1 phase. Dissociation and reassembly is regulated by phosphorylation {ECO:0000250|UniProtKB:Q80VW7}

Tissue Location

Predominantly expressed by lymphoid tissues. Highly expressed in the spleen, lymph nodes and peripheral blood leukocytes, expressed at lower level in the thymus. Mainly expressed by germinal center B-lymphocytes, a stage in which receptor and ligand interactions are crucial for B-lymphocyte maturation. Expressed by B- and T- lymphocytes, Natural killer cells and CD1a(+)CD14(-) but not CD1a(-)CD14(+) dendritic cells. Weakly or not expressed in fetal liver and in adult bone marrow.

AKNA Antibody (N-term) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

AKNA Antibody (N-term) Blocking peptide - Images

AKNA Antibody (N-term) Blocking peptide - Background

AKNA transcription factor that specifically activates the expression of the CD40 receptor and its ligand CD40L/CD154, two cell surface molecules on lymphocytes that are critical for antigen-dependent-B-cell development. It binds to A/T-rich promoters.

AKNA Antibody (N-term) Blocking peptide - References

Sims-Mourtada, J.C., et al. DNA Cell Biol. 24(5):325-338(2005) Siddiq, A., et al. Nature 410(6826):383-387(2001)