

CCDC99 Antibody (C-term) Blocking peptide Synthetic peptide Catalog # BP13504b

Specification

CCDC99 Antibody (C-term) Blocking peptide - Product Information

Primary Accession

<u>Q96EA4</u>

CCDC99 Antibody (C-term) Blocking peptide - Additional Information

Gene ID 54908

Other Names

Protein Spindly {ECO:0000255|HAMAP-Rule:MF_03041}, hSpindly, Arsenite-related gene 1 protein, Coiled-coil domain-containing protein 99 {ECO:0000255|HAMAP-Rule:MF_03041}, Rhabdomyosarcoma antigen MU-RMS-404A, Spindle apparatus coiled-coil domain-containing protein 1 {ECO:0000255|HAMAP-Rule:MF_03041}, SPDL1 {ECO:0000255|HAMAP-Rule:MF_03041}

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13504b was selected from the C-term region of CCDC99. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

CCDC99 Antibody (C-term) Blocking peptide - Protein Information

Name SPDL1 {ECO:0000255|HAMAP-Rule:MF_03041}

Function

Required for the localization of dynein and dynactin to the mitotic kintochore. Dynein is believed to control the initial lateral interaction between the kinetochore and spindle microtubules and to facilitate the subsequent formation of end-on kinetochore-microtubule attachments mediated by the NDC80 complex. Also required for correct spindle orientation. Does not appear to be required for the removal of spindle assembly checkpoint (SAC) proteins from the kinetochore upon bipolar spindle attachment (PubMed:17576797, PubMed:19468067). Acts as an adapter protein linking the dynein motor complex to various cargos and converts dynein from a non-processive to a highly processive motor in the presence of dynactin. Facilitates the interaction between dynein and dynactin and activates



dynein processivity (the ability to move along a microtubule for a long distance without falling off the track) (PubMed:25035494). Plays a role in cell migration (PubMed:30258100).

Cellular Location

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Nucleus Cytoplasm, cytoskeleton, spindle pole. Note=Localizes to the nucleus in interphase and to the kinetochore in early prometaphase. Relocalizes to the mitotic spindle pole before metaphase and is subsequently lost from the spindle poles after chromosome congression is completed. Removal of this protein from the kinetochore requires the dynein/dynactin complex

CCDC99 Antibody (C-term) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

CCDC99 Antibody (C-term) Blocking peptide - Images

CCDC99 Antibody (C-term) Blocking peptide - Background

CCDC99 is required for the localization of dynein and dynactin to the mitotic kintochore. Dynein is believed to control the initial lateral interaction between the kinetochore and spindle microtubules and to facilitate the subsequent formation of end-on kinetochore-microtubule attachments mediated by the NDC80 complex. Also required for correct spindle orientation. Does not appear to be required for the removal of spindle assembly checkpoint (SAC) proteins from the kinetochore upon bipolar spindle attachment.

CCDC99 Antibody (C-term) Blocking peptide - References

Barisic, M., et al. Mol. Biol. Cell 21(12):1968-1981(2010)Gassmann, R., et al. Genes Dev. 24(9):957-971(2010)Chan, Y.W., et al. J. Cell Biol. 185(5):859-874(2009)