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Spindly Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57997

Specification

Spindly Polyclonal Antibody - Product Information

Application	**IHC-P, IHC-F, IF, ICC, E**
Primary Accession	Q96EA4
Reactivity	**Rat, Pig, Dog, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**67 KDa**
Physical State	**Liquid**
Immunogen	**KLH conjugated synthetic peptide derived from human Protein Spindly**
Epitope Specificity	**401-500/605**
Purity	
affinity purified by Protein A	
Buffer	**0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.**
SUBCELLULAR LOCATION	**Cytoplasm, cytoskeleton, 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.**
SIMILARITY	**Belongs to the Spindly family.**
Post-translational modifications	**Phosphorylated upon DNA damage, probably by ATM or ATR.**
Important Note	**This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.**

Background Descriptions
The five integral families of plant hormones consists of auxins, cytokinins, giberellins (GAs), abscisic acid (ABA), and ethylene. Giberellins, which consist of over fifty family members, mediate shoot growth. In Arabidopsis, SPINDLY (SPY) negatively regulates GA signal transduction. ERA1 (enhanced response to absisic acid), which is identical to WIGGUM, controls floral and shoot apical meristem size and floral organ number in response to ABA. Ethylene is perceived by a family of five receptors, one of which is ETR1, whereas CTR1 is a negative regulator of the ethylene signal transduction pathway . Ethylene is also produced endogenously in Arabidopsis via a biosynthetic pathway, which is catalyzed by ACC synthase and ACC oxidase.

Spindly Polyclonal Antibody - 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-40.4A, Spindle apparatus coiled-coil domain-containing protein 1 {ECO:0000255|HAMAP-Rule:MF_03041}, SPDL1 {ECO:0000255|HAMAP-Rule:MF_03041}

Dilution
IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Format
0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage
Store at -20 ℃ for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 ℃.

Spindly Polyclonal Antibody - 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).

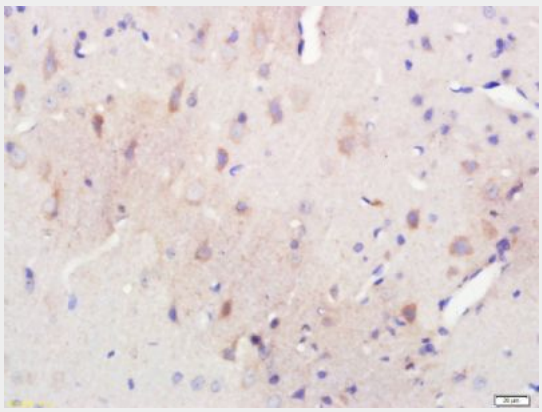
Cellular Location
Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Chromosome, centromere, kinetochore. Nucleus Cytoplasm, cytoskeleton, spindle pole. Note=Localizes to the nucleus in interphase and to the kinetochore in early prometaphase. Relocalizes to the mitotic spindle pole before 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

Spindly Polyclonal Antibody - Protocols

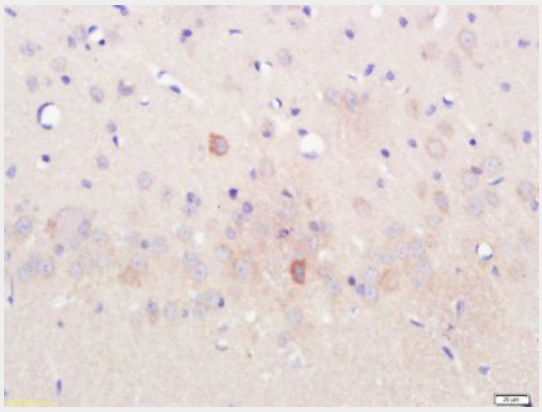
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Spindly Polyclonal Antibody - Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;
Incubation: Anti-Spindly Polyclonal Antibody, Unconjugated(bs-2321R) 1:500, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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