

SPAG5 (LX-8): sc-100885

BACKGROUND

SPAG5 (sperm-associated antigen 5), also known as MAP126, hMAP126, DEEPEST or Astrin, is a 1,193 amino acid protein that is expressed at high levels in testis and at lower levels in liver, placenta, pancreas, colon and thymus. Localized specifically to spindle poles during prophase and throughout the spindle during metaphase and anaphase, SPAG5 is essential for proper spindle formation and is thought to be involved in the dynamic and functional regulation of mitotic spindles. Additionally, SPAG5 plays a role in sister chromatid cohesion and subsequent chromatid separation and, via its association with chromatids, is an important regulator of chromosome integrity. SPAG5 has a long stalk and a globular head domain through which it forms a homodimer that is characterized by aster-like structures. Upon DNA damage, SPAG5 may be phosphorylated by ATR or Atm.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SPAG5 (human) mapping to 17q11.2.

SOURCE

SPAG5 (LX-8) is a mouse monoclonal antibody raised against amino acids 1082-1191 representing partial length SPAG5 of human origin.

PRODUCT

Each vial contains 50 μ g IgG₃ kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

SPAG5 (LX-8) is recommended for detection of SPAG5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for SPAG5 siRNA (h): sc-76545, SPAG5 shRNA Plasmid (h): sc-76545-SH and SPAG5 shRNA (h) Lentiviral Particles: sc-76545-V.

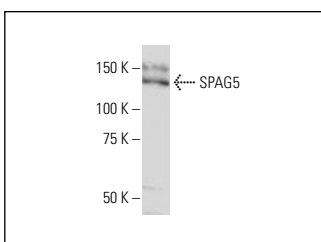
Molecular Weight of SPAG5: 140 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



SPAG5 (LX-8): sc-100885. Western blot analysis of SPAG5 expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Li, M., Li, A., Zhou, S., Lv, H. and Yang, W. 2019. SPAG5 upregulation contributes to enhanced c-MYC transcriptional activity via interaction with c-MYC binding protein in triple-negative breast cancer. *J. Hematol. Oncol.* 12: 14.

RESEARCH USE

For research use only, not for use in diagnostic procedures.