

Zwilch (S-20): sc-66305

BACKGROUND

Zwilch is the human homolog of the *Drosophila* Zwilch protein. The *Drosophila* Zwilch forms a complex with both ROD (Rough Deal) and ZWINT (zeste-White 10, also designated ZW10) proteins. This complex is important for chromosome segregation because it recruits cytoplasmic Dynein to the kinetochore and plays a crucial role in the spindle checkpoint. The role of Zwilch in complex is thought to be evolutionarily conserved because the human homologs of Zwilch, ZWINT and ROD coimmunoprecipitate in a human cell line called HeLa. The human Zwilch, ZWINT and ROD complex localizes to the kinetochores at prometaphase. Mutations were discovered in Zwilch, ZWINT and ROD during a screen for mutations in alleles encoding putative chromosome instability genes in cases of human colorectal cancer. These mutations may contribute in part to the chromosomal instability phenotype of colorectal tumor cells.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZWILCH (human) mapping to 15q22.31; Zwilch (mouse) mapping to 9 C.

SOURCE

Zwilch (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Zwilch of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-66305 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Zwilch (S-20) is recommended for detection of Zwilch of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Zwilch (S-20) is also recommended for detection of Zwilch in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Zwilch siRNA (h): sc-63261, Zwilch siRNA (m): sc-63262, Zwilch shRNA Plasmid (h): sc-63261-SH, Zwilch shRNA Plasmid (m): sc-63262-SH, Zwilch shRNA (h) Lentiviral Particles: sc-63261-V and Zwilch shRNA (m) Lentiviral Particles: sc-63262-V.

Molecular Weight of Zwilch: 75 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.