

Zwilch (NB-C38): sc-135615

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.

SOURCE

Zwilch (NB-C38) is a mouse monoclonal antibody raised against recombinant Zwilch protein of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

Zwilch (NB-C38) is recommended for detection of Zwilch of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 Zwilch siRNA (h): sc-63261, Zwilch shRNA Plasmid (h): sc-63261-SH and Zwilch shRNA (h) Lentiviral Particles: sc-63261-V.

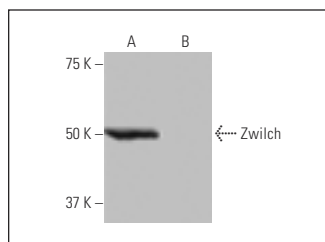
Molecular Weight of Zwilch: 75 kDa.

Positive Controls: human Zwilch transfected 293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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



Zwilch (NB-C38): sc-135615. Western blot analysis of Zwilch expression in human Zwilch transfected (A) and non-transfected (B) 293T whole cell lysates.

STORAGE

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

PROTOCOLS

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