

TYW5 (G-9): sc-390701

BACKGROUND

Chromosome 2, the second largest human chromosome, consists of 237 million bases encoding over 1,400 genes, comprising approximately 8% of the human genome. A number of genetic diseases are linked to genes on chromosome 2. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the ABCA12 gene. The lipid metabolic disorder sitosterolemia is associated with ABCG5 and ABCG8. An extremely rare recessive genetic disorder, Alström syndrome is due to mutations in the ALMS1 gene. Interestingly, chromosome 2 contains what appears to be a vestigial second centromere and vestigial telomeres, which gives credence to the hypothesis that human chromosome 2 is the result of an ancient fusion of two ancestral chromosomes seen in modern form today in apes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TYW5 (human) mapping to 2q33.1; Tyw5 (mouse) mapping to 1 C1.3.

SOURCE

TYW5 (G-9) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 7-35 of TYW5 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_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-390701 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

TYW5 (G-9) is recommended for detection of TYW5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

Suitable for use as control antibody for TYW5 siRNA (h): sc-94863, TYW5 siRNA (m): sc-108179, TYW5 shRNA Plasmid (h): sc-94863-SH, TYW5 shRNA Plasmid (m): sc-108179-SH, TYW5 shRNA (h) Lentiviral Particles: sc-94863-V and TYW5 shRNA (m) Lentiviral Particles: sc-108179-V.

Molecular Weight of TYW5 isoform 1/2: 37/18 kDa.

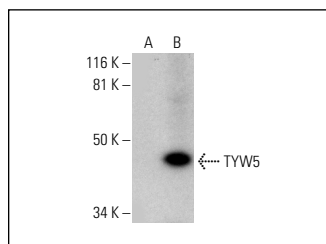
Positive Controls: TYW5 (h2): 293T Lysate: sc-372913.

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).
- 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TYW5 (G-9): sc-390701. Western blot analysis of TYW5 expression in non-transfected: sc-117752 (A) and human TYW5 transfected: sc-372913 (B) 293T whole cell lysates.

RESEARCH USE

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