

POFUT2 (H-5): sc-373804

BACKGROUND

Glycosyltransferases that mediate the regio- and stereoselective transfer of sugars, such as the fucosyltransferases, determine cell surface-carbohydrate profiles, which is an essential interface for biological recognition processes. Fucosyltransferases catalyze the covalent association of fucose to different positional linkages in sugar acceptor molecules. POFUT2 (peptide-O-fucosyltransferase 2), also known as FUT13 or O-FucT-2, is a fucosyltransferase responsible for transferring fucose to serine or threonine residues in properly folded thrombospondin repeats (TSRs) through an O-glycosidic linkage. POFUT2 localizes to the endoplasmic reticulum and exists in three isoforms (designated A, B and C) which exhibit different patterns of expression. In addition, POFUT2 may have chaperone-like activity and function in quality control and protein folding.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: POFUT2 (human) mapping to 21q22.3; Pofut2 (mouse) mapping to 10 C1.

SOURCE

POFUT2 (H-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 291-327 within an internal region of POFUT2 of human origin.

PRODUCT

Each vial contains 200 μ g 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-373804 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

POFUT2 (H-5) is recommended for detection of POFUT2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 POFUT2 siRNA (h): sc-76186, POFUT2 siRNA (m): sc-76187, POFUT2 shRNA Plasmid (h): sc-76186-SH, POFUT2 shRNA Plasmid (m): sc-76187-SH, POFUT2 shRNA (h) Lentiviral Particles: sc-76186-V and POFUT2 shRNA (m) Lentiviral Particles: sc-76187-V.

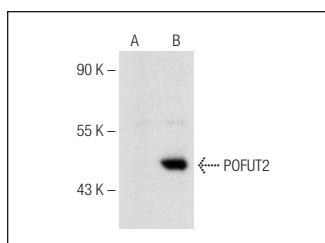
Molecular Weight of POFUT2: 50 kDa.

Positive Controls: POFUT2 (m2): 293T Lysate: sc-122676.

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). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



POFUT2 (H-5): sc-373804. Western blot analysis of POFUT2 expression in non-transfected: sc-117752 (A) and mouse POFUT2 transfected: sc-122676 (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.

RESEARCH USE

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

PROTOCOLS

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