SANTA CRUZ BIOTECHNOLOGY, INC.

POFUT2 (S-20): sc-74992

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.

CHROMOSOMAL LOCATION

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

SOURCE

POFUT2 (S-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of POFUT2 of human origin.

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-74992 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

POFUT2 (S-20) is recommended for detection of POFUT2 of mouse, rat and 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)], 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).

POFUT2 (S-20) is also recommended for detection of POFUT2 in additional species, including equine, canine, bovine, porcine and avian.

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.

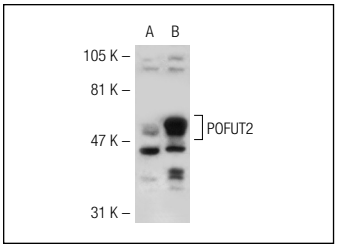
Molecular Weight of POFUT2: 50 kDa.

Positive Controls: POFUT2 (h): 293T Lysate: sc-116920.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



POFUT2 (S-20): sc-74992. Western blot analysis of POFUT2 expression in non-transfected: sc-117752 (**A**) and human POFUT2 transfected: sc-116920 (**B**) 293T whole cell lysates.

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.