
Recombinant Human POFUT1 Protein, N-GST & C-His

Catalog Number: bs-105514P

Species: Human

AA Seq: 284-379/388

Predicted MW: 39.02 kDa

Tags: N-GST & C-His

Activity: Not tested

Purity: >90% as determined by SDS-PAGE.

Purification: AC

Form: Lyophilized

Storage: Lyophilized from a solution in PBS pH 7.4, 0.02% NLS, 1mM EDTA, 4% Trehalose, 1% Mannitol.

Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8°C for frequent use. Store at -20 to -80°C for twelve months from the date of receipt.

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. POFUT1 (protein O-fucosyltransferase 1), also known as FUT12, O-FUT or O-FucT-1, is a 388 amino acid protein that localizes to the endoplasmic reticulum and belongs to the fucosyltransferase subfamily of glycosyltransferases. Highly expressed in pancreas, kidney, lung, heart, brain, liver, placenta and skeletal muscle, POFUT1 uses manganese to catalyze the attachment (specifically the O-glycosidic linkage) of fucose to a conserved serine or threonine residue on a protein acceptor. Via its catalytic activity, POFUT1 plays an important role in Notch signaling, as Notch ligands can serve as POFUT1 substrates. Two isoforms of POFUT1 exist due to alternative splicing events.