

Product datasheet for TP506140

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Pofut1 (NM_080463) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse protein O-fucosyltransferase 1 (Pofut1), with C-

terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone >MR206140 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MGAAAWAPPHLLRASFLLLLLLLPLRGRSAGSWDLAGYLLYCPCMGRFGNQADHFLGSLAFAKLLNRTL AVPPWIEYQHHKPPFTNLHVSYQKYFKLEPLQAYHRVVSLEDFMENLAPSHWPPEKRVAYCFEVAAQRSP DKKTCPMKEGNPFGPFWDQFHVSFNKSELFTGISFSASYKEQWTQRFPAKEHPVLALPGAPAQFPVLEEH RELQKYMVWSDEMVRTGEALISAHLVRPYVGIHLRIGSDWKNACAMLKDGTAGSHFMASPQCVGYSRSTA TPLTMTMCLPDLKEIQRAVTLWVRALNARSVYIATDSESYVSEIQQLFKDKVRVVSLKPEVAQIDLYILG

QADHFIGNCVSSFTAFVKRERDLHGRQSSFFGMDRPSQLRDEF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 44.7 kDa

Concentration: >0.05 μg/μL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: <u>NP 536711</u> **Locus ID:** 140484

UniProt ID: Q91ZW2





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RefSeq Size: 5618

Cytogenetics: 2 H1
RefSeq ORF: 1182

Synonyms: mKIAA0180; O-FucT-1

Summary: Catalyzes the reaction that attaches fucose through an O-glycosidic linkage to a conserved

serine or threonine residue found in the consensus sequence C2-X(4,5)-[S/T]-C3 of EGF domains, where C2 and C3 are the second and third conserved cysteines. Specifically uses GDP-fucose as donor substrate and proper disulfide pairing of the substrate EGF domains is required for fucose transfer. Plays a crucial role in NOTCH signaling. Initial fucosylation of NOTCH by POFUT1 generates a substrate for FRINGE/RFNG, an acetylglucosaminyltransferase that can then extend the fucosylation on the NOTCH EGF repeats. This extended fucosylation is required for optimal ligand binding and canonical NOTCH signaling induced by DLL1 or

JAGGED1. Fucosylates AGRN and determines its ability to cluster acetylcholine receptors

(AChRs).[UniProtKB/Swiss-Prot Function]