

**Recombinant Human DDOST / OST48 Protein****Cat.NO.: TP06991**

3th Edition

**Synonyms:**AGER1;CDG1R;OKSWcl45;OST;OST48;WBP1

**Description:**The enzyme oligosaccharyltransferase (dolichyl-diphosphooligosaccharide-protein glycosyltransferase) (DDOST), or 48-kDa subunit (OST48) is one of the catalytic subunits in this complex, exerts a typical type I membrane topology, containing a large luminal domain, a hydrophobic transmembrane domain and a short cytosolic peptide tail. DDOST/OST48 catalyzes the transfer of a high-mannose oligosaccharide (GlcNac<sub>2</sub>Man<sub>9</sub>Glc<sub>3</sub>) from a dolichol-linked oligosaccharide donor (dolichol-P-GlcNac<sub>2</sub>Man<sub>9</sub>Glc<sub>3</sub>) onto the asparagine acceptor site within an Asn-X-Ser/Thr consensus motif in nascent polypeptide chains across the membrane of the endoplasmic reticulum. The mammalian oligosaccharyltransferase (OST) is an oligomeric complex composed of three type I transmembrane proteins of the endoplasmic reticulum: ribophorin I (RI), ribophorin II (RII), and OST48. OST48 is not a glycoprotein and is not recognized by antibodies to either ribophorin. Like ribophorins I and II, OST48 was found to be an integral membrane protein, with the majority of the polypeptide located within the lumen of the endoplasmic reticulum (ER). OST48 does not show significant amino acid sequence homology to either ribophorin I or II. It had been found that only the luminal domain of RI contains ER retention information. The dilysine motif in OST48 functions as an ER localization motif because OST48 in which the two lysine residues are replaced by serine (OST48ss) is no longer retained in the ER and is found instead also at the plasma membrane.

**Form:**PBS**Molecular Weight:**42.7 kDa**Sequences:**Ser 43-Pro 427**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.