

## Product datasheet for **MC216017**

### Ispd (NM\_178629) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ispd (NM_178629) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ispd
Synonyms:	4930579E17Rik; AV040780
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**Fully Sequenced ORF:** >MC216017 representing NM\_178629  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGCCTGGGCGTGCAGCAGGCCCGCTGAGCCTGGGCATTGCGTGAGCGGCCCGCGGGCGCGGGCT  
 CAGCGTTCCTCGGAGTCCCGTTGTCCGTGCTGGGGCGGAGCCCGGAACCGCCCTGGAACCGTGGCCGC  
 CGTGCTGCCGGCTGGGGTTGCGGGGAAAGGATGGGCGTCCGCACCCGAAGCAGTTCTGCCGGTTCTG  
 GAAAGGCCGCTCATCAGCTACACTTTGCAGGCTATGGAGAGAGTATGCTGGATAAAGGACATTGTTGTGA  
 CAGTGACAGGGGAGAACATGGAAGCAATGAGAAGTATCATCCAGAGGTATGGGCATAAGCGCATCTCACT  
 AGCTGAGGCTGGAGCCACGCGCCACAGATCAATTTTCAATGGACTGAAAGCCCTGCCAGAAGATCAGCCA  
 GACTGTAACTACTAAGCCAGAAGTGGTATTATCCATGACGCCGTGAGACCTTTTGTGAGGAAGATA  
 TCCTCCTGAGAGTTGCTTAGCAGCTAAGGAACATGGGGCAGCAGGCAATTCGACCTCTGGTGTCCAC  
 TGTTCATCAGTCCCTCTGCTGATGGTCACCTAGACCACTACTGGACCGTCCCAAGCATAGGGCAAGCGAA  
 ATGCCCCAGGCTTTTCTCTTTGATGTCATCTATGAAGCGTATCAGCAGTGTAGTATTTGACTTGGAAAT  
 TTGGAACAGAGTCTTGCAGTTGGCTCTAAAATACTGTCACAGGAAAGCAAACTTGTAGAAGGGCCCCC  
 TGCCCTCTGGAAGGTGACCTACAAAAGACCTGTGTGCAGCTGAAGCCATGATTAAGAGAAAAATTTCA  
 CAAGAGATTTGTGTGGTCATGAACACAAAAGATGAAGAATCTGTAGGACATCTTCTTGAGGAAGCGCTAA  
 GAAAGGAACTAAATTGTATGAAAATCACATCTACAGTTATGGATCACATAGGCGGAGACATTAGGAACTT  
 CATAGAGCAATGTTACAGTTTCTCTGTGTGAATGTTGTGTCCCTGATAGTCAAGAAACCAGGAAGTTA  
 CTGCGTATCCTCGAAGAGAGCAGCCTTCTCTGTATCCTGTAGTTGTTGTTTGGTACACTGCTTTG  
 ACTTCAGTCAGTGCCACTCGCTCAGAAGATGGAAGCCTGGTGTGGATTAGGGGGTTAGCAAAGGAAGT  
 GAAAGAAAGGAATATTCTCCTAAGTGGACTCCTCCTAAACTACTCACAGGATGAGCAGAAGCTACAAGAG  
 AGTTTAGGACAAAAGTGCAGCCATCATAGCTGCCTTAGTTAAGGAAAGAAATTCTGCACTTGTGGGCAGC  
 TCCTGGTGGCA**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_178629
- Insert Size:** 1344 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
  5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM\\_178629.6](#), [NP\\_848744.2](#)

RefSeq Size: 2818 bp

RefSeq ORF: 1344 bp

Locus ID: 75847

UniProt ID: [Q5RJG7](#)

Cytogenetics: 12 A3

**Gene Summary:** Cytidylyltransferase required for protein O-linked mannosylation (By similarity). Catalyzes the formation of CDP-ribitol nucleotide sugar from D-ribitol 5-phosphate (By similarity). CDP-ribitol is a substrate of FKTN during the biosynthesis of the phosphorylated O-mannosyl trisaccharide (N-acetylgalactosamine-beta-3-N-acetylglucosamine-beta-4-(phosphate-6-)mannose), a carbohydrate structure present in alpha-dystroglycan (DAG1), which is required for binding laminin G-like domain-containing extracellular proteins with high affinity (By similarity). Shows activity toward other pentose phosphate sugars and mediates formation of CDP-ribulose or CDP-ribose using CTP and ribulose-5-phosphate or ribose-5-phosphate, respectively (By similarity). Not Involved in dolichol production (By similarity).

[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) encodes the longest protein (isoform 1).