

Product datasheet for MR229407

Ispd (NM_001289503) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ispd (NM_001289503) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ispd
Synonyms: 4930579E17Rik; AV040780
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >MR229407 representing NM_001289503
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAAGCAATGAGAAGTATCATCCAGAGGTATGGGCATAAGCGCATCTCACTAGCTGAGGCTGGAGCCA
 CGCGCCACAGATCAATTTTCAATGGACTGAAAGCCCTGGCAGAAGATCAGCCAGACTGTAACTCACTAA
 GCCAGAAGTGGTATTATCCATGACGCCGTGAGACCTTTTGTGAGGAAGATATCCTCCTGAGAGTTGTC
 TTAGCAGCTAAGGAACATGGGGCAGCAGGCAATTCGACCTCTGGTGTCCACTGTCATCAGTCCCTCTG
 CTGATGGTCACTTAGACCACTCACTGGACCGTGCCAAGCATAGGGCAAGCGAAATGCCCCAGGCTTTTCT
 CTTTGTATGTCATCTATGAAGCGTATCAGCAGTGTAGTGATTTTGACTTGGAAATTTGGAACAGAGTGCTTG
 CAGTTGGCTCTAAAATACTGTCACAGGAAAGCAAACTTGTAGAAGGGCCCTGCCCTCTGGAAGGTGA
 CCTACAAAACAGACCTGTGTGCAGCTGAAGCCATGATTAAGAGAAAATTTACAAAGAGATTTGTGTGGT
 CATGAACACAAAAGATGAAGAATCTGTAGGACATCTTCTTGAGGAAGCGCTAAGAAAGGAACTAAATTGT
 ATGAAAATCACATCTACAGTTATGGATCAGATAGGCGGAGACATTAGGAATTCATAGAGCAATGTTACA
 GTTTCATCTGTGTAATGTTGTGTCCTGATAGTCAAGAAACCAGGAAGTTACTGCGTATCCTCGAAGA
 GAGCAGCCTTCTCTTCTGTATCCTGTAGTTGTTGTTTTGGTACACTGCTTTGACTTCACGTCAGTGCCA
 CTCGCTCAGAAGATGAAAGCCTGGTGTGGATTAGGGGTTAGCAAAGGAAGTAAAAGAAAGGAATATTC
 TCCTAAGTGGACTCCTCTAACTACTCACAGGATGAGCAGAAGCTACAAGAGAGTTTAGGACAAAGTGC
 AGCCATCATAGCTGCCTTAGTTAAGGAAAGAAATCTGCCTTGTGGCAGCTCCTGGTGGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

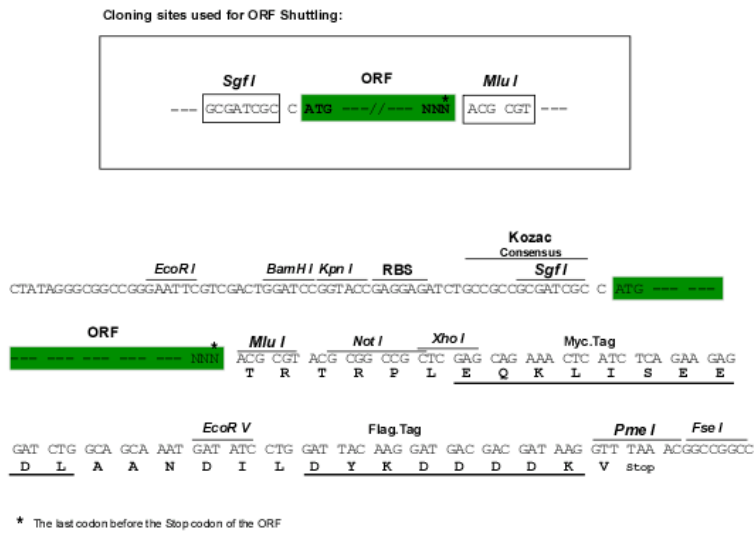
Protein Sequence: >MR229407 representing NM_001289503
 Red=Cloning site Green=Tags(s)

MEAMRSIIQRYGHKRISLAEAGATRHRSIFNGLKALAEDQPDCKLTKPEVVIHDAVRPFVEEDILLRVV
 LAAKEHGAAGAIRPLVSTVISPSADGHLDSLDRAKHRASEMPQAFLLFDVIYEAYQCSDFDLEFGTECL
 QLALKYCHRKAKLVEGPPALWKVTKQDLCAEAMIKEKISQEICVVMNTKDEESVGHLLLEEALRKELNC
 MKITSTVMDHIGGDIRNFI EQCYSFICVNVVSPDSQETRKLRLILEESSPLLYPVVVVVLVHCFDFTSVP
 LAQKMESLVWIRGLAKEVKERNILL SGLLLL NYSQDEQKLQESLGGQSAIIAALVKERNALSALVGQLLVA

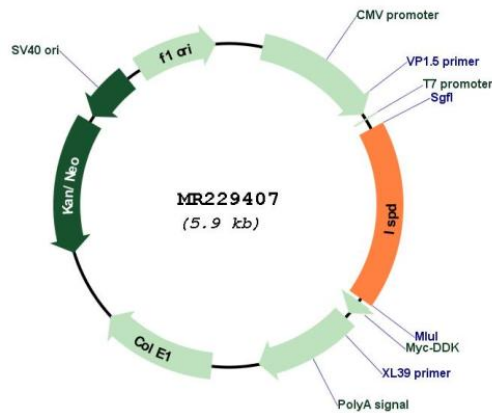
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001289503

ORF Size: 1044 bp

OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info
OTI Annotation:	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
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:	<ol style="list-style-type: none">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_001289503.1 , NP_001276432.1
RefSeq Size:	2400 bp
RefSeq ORF:	1047 bp
Locus ID:	75847
UniProt ID:	Q5RIG7
Cytogenetics:	12 A3
MW:	39.4 kDa
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]