

Product datasheet for MR229009

Ispd (NM_001289504) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ispd (NM_001289504) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ispd
Synonyms:	4930579E17Rik; AV040780
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR229009 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCTGGGCGTGCAGCAGGCCCGCTGAGCCTGGGCATTGCGTGAGCGGCCCGGGCGCGGGCT
CAGCGTCCCGGAGTCCCGTTGTCCGTCGCTGGGGCGGAGCCCGGAACCGCCCTGGAACCGTGGCCGC
CGTGCTGCCGGTGGGGTTGCGGGAAAGGATGGGCGTCCGCACCCGAAGCAGTTCTGCCGGTTCTG
GAAAGGCCGCTCATCAGCTACACTTTCAGGCTATGGAGAGAGTATGCTGGATAAAGGACATTGTTGTGA
CAGTGACAGGGGAGAACATGGAAGCAATGAGAAGTATCATCCAGAGGTATGGGCATAAGCGCATCTCACT
AGCTGAGGCTGGAGCCACGCGCCACAGATCAATTTTCAATGGACTGAAAGCCCTGGCAGAAGATCAGCCA
GACTGTAAACTACTAAGCCAGAAGTGGTGATTATCCATGACGCCGTGAGACCTTTTGTGAGGAAGATA
TCCTCCTGAGAGTTGTCTTAGCAGCTAAGGAACATGGGGCAGCAGGAGCAATTCGACCTCTGGTGTCCAC
TGTATCAGTCCCTCTGCTGATGGTCACTTAGACCACTCACTGGACCGTGCCTAAGCATAGGGCAAGCGAA
ATGCCCGAGGCTTTTCTTTGATGTCTATGAAGCGTATCAGCAGTGTAGTATTTGACTTGGAAAT
TTGGAACAGAGTGCTTGCAGTTGGCTCTAAAATACTGTACAGGAAAGCAAACTTGTAGAAGGGCCCC
TGCCCTCTGGAAGGTGACCTACAAACAAGACCTGTGTGCAGCTGAAGCCATGATTAAGGTGTGTTCAAC
CTTGTGACTGTGAGCGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR229009 protein sequence
 Red=Cloning site Green=Tags(s)

MEPGPCSRPAEPGHCVSGPAGAGSAPFESPLSVAGAEPGNRPGTVAAVLPAGGCGERMGVRTPKQFCRVL
 ERPLISYTLQAMERVCWIKDIVVTVTGENMEAMRSIIQRYGHKRISLAEAGATRHRSIFNGLKALAEQDP
 DCKLTKPEVVIHDAVRPFVEEDILLRVVLAKEHGAAGAIRPLVSTVISP SADGHLHDHSLDRAKHRASE
 MPQAFLLFDVIYEAYQCSDFLEFGTECLQLALKYCHRKAKLVEGPPALWKVITYKQDLCAAEMIKGVFN
 LVTVSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001289504

ORF Size: 861 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:

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_001289504.1](#), [NP_001276433.1](#)

RefSeq Size: 3246 bp

RefSeq ORF: 861 bp

Locus ID: 75847

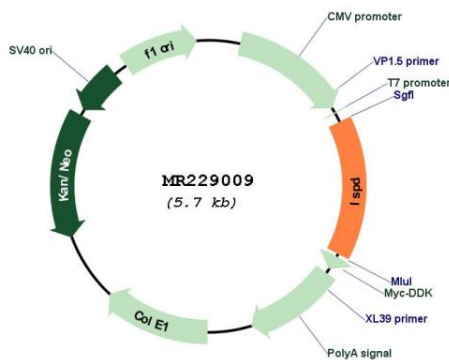
UniProt ID: [Q5RJG7](#)

Cytogenetics: 12 A3

MW: 31 kDa

Gene Summary: Cytidyltransferase 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]

Product images:



Circular map for MR229009