Recombinant human IMP Dehydrogenase 2/IMPDH2 protein

Catalog Number: ATGP1274

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-514aa

UniProt No.
P12268

NCBI Accession No.
NP_000875

Alternative Names
Inosine-5'-monophosphate dehydrogenase 2, IMPD2, IMPDH-II

PRODUCT SPECIFICATION

Molecular Weight
58kDa (534aa)

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 20% glycerol, 150mM NaCl

Purity
> 90% by SDS-PAGE

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
IMPDH2 belongs to the IMPDH/GMPR family. It catalyzes the NAD-dependent oxidation of inosine-5'-monophosphate into xanthine-5'-monophosphate, which is then converted into guanosine-5'-monophosphate. IMPDH2 is the rate-limiting enzyme in the de novo guanine nucleotide biosynthesis. It is thus involved in maintaining cellular guanine deoxy- and ribonucleotide pools needed for DNA and RNA synthesis. Also IMPDH1 and IMPDH2 are targets for the important immunosuppressive drug, mycophenolic acid (MPA). Recombinant human IMPDH2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using

Recombinant human IMP Dehydrogenase 2/IMPDH2 protein

Catalog Number: ATGP1274

conventional chromatography techniques.

Amino acid Sequence

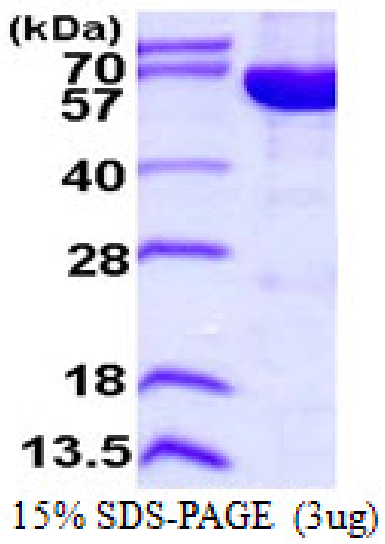
MGSSHHHHHH SSGLVPRGSH MADYLISGGT SYVPDDGLTA QQLFNCGDGL TYNDFLILPG YIDFTADQVD LTSALTKKIT LKTPLVSSPM DTVTEAGMAI AMALTGGIGF IHHNCTPEFQ ANEVRKVKKY EQGFITDPVV LSPKDRVRDV FEAKARHGFC GIPITDTGRM GSRLVGIISS RDIDFLKEEE HDCFLEEIMT KREDLVVAPA GITLKEANEI LQRSKKGKLP IVNEDDELVA IIARTDLKKN RDYPLASKDA KKQLLCGAAI GTHEDDKYRL DLLAQAGVDV VVLDSSQGNS IFQINMIKYI KDKYPNLQVI GGNVVTAAQA KNLIDAGVDA LRVGMGSGSI CITQEVLACG RPQATAVYKV SEYARRFGVP VIADGGIQNV GHIAKALALG ASTVMMGSLL AATTEAPGEY FFSDGIRLKK YRGMGSLDAM DKHLSSQNRY FSEADKIKVA QGVSGAVQDK GSIHKFVPYL IAGIQHSCQD IGAKSLTQVR AMMYSGELKF EKRTSSAQVE GGVHSLHSYE KRLF

General References

Wu TY, Peng Y, et al. (2010) Pharmacol. 161(7):1584-98.
Bremer S, et al. (2008) Transplantation. 85(1):55-61.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.