

**IMPDH1, 1-514aa, Human, His tag, E.coli**

**Cat.NO.: TP02660**

3th Edition

**Synonyms:**Inosine-5'-monophosphate dehydrogenase 1, IMPD, IMPD1, LCA11, RP10

**Description:**Inosine-5'-monophosphate dehydrogenase 1, also known as IMPDH1 catalyzes the synthesis of xanthine monophosphate (XMP) from inosine-5'-monophosphate (IMP). Also, IMPDH1 is a ubiquitously expressed enzyme, functioning as a homotetramer, which catalyzed the rate-limiting step in de novo synthesis of guanine nucleotides. As such, it plays an important role in cyclic nucleoside metabolism within photoreceptors.

**Form:**Liquid. In 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 20% glycerol

**Molecular Weight:**57.5 kDa (534aa), confirmed by MALDI-TOF

**Sequences:**

MGSSHHHHHHSSGLVPRGSHMADYLISGGTGYVPEDGLTAQQLFASADGLTYNDFLILPGFIDFIADVDLTLSALTR  
KITLKTPLISSPMDTVTEADMAIAMALMGIGFIHHNCTPEFQANEVRKVKKFEQGFITDPVVLSPSHTVGDVLEAKM  
RHGFSGIPITETGTMGSKLVGIVTSRDIDFLAEKDHTTLLSEVMTPRIELVVAPAGVTLKEANEILQRSKKGKLPVND  
CDELVAIIARTDLKKNRDYPLASKDSQKQLLCGAAVGTREDDKYRLDLLTQAGVDVIVLDSSQGNSVYQIAMVHYIK  
QKYPHLQVIGGNVVTAQAQAKNLIDAGVDGLRVGMGCGSICITQEVMACGRPQGTAVYKVAEYARRFGVPPIADGGI  
QTVGHVVKALALGASTVMMGSLLAATTEAPGEYFFSDGVRLKKYRGMGSLDAMEKSSSSQKRYFSEGDKVKIAQG  
VSGSIQDKGSIQKFVPYLIAGIQHGCQDIGARSLSVLRSMYSSELKFEKRTMSAQIEGGVHGLHSYEKRLY

**Purity:**> 95% by HPLC

**Concentration:**0.5mg/ml (determined by Bradford assay)

**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.