
Product Data Sheet

Product Name: UMPS Human

Cat. No.: GP22385

Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	OPRT; Uridine 5'-monophosphate synthase; UMP synthase; Orotate phosphoribosyltransferase ; OPRT; OPRTase; Orotidine 5'-phosphate decarboxylase ; ODC; OMPdecase.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MAVARAALGP LVTGLYDVQA FKFGDFVLKS GLSSPIYIDL RGIVSRPRL SQVADILFQT AQNAGISFDT VCGVPYTALP LATVICSTNQ IPMLIRRKET KDYGTKRLVE GTINPGETCL IIEDVVTSGS SVLETVEVLQ KEGLKVTDAL VLLDREQGGK DKLQAHGIRL HSVCTLSKML EILEQQKKVD AETVGRVKRF IQENVFVAAN HNGSPLSIKE APKELSFGAR AELPRIHPVA SKLLRLMQKK ETNLCLSADV SLARELLQLA DALGPSICML KTHVDILNDF TLDVMKELIT LAKCHEFLIF EDRKFADIGN TVKKQYEGGI FKIASWADLV NAHVVPGSGV VKGLQEVGLP LHRGCLLIAE MSSTGSLATG DYTRAAVRMA EEHSEFVVG F ISGSRVSMKP EFLHLTPGVQ LEAGGDNLGQ QYNSPQEVIG KRGSDIIVG RGIISAADRL EAAEMYRCAA WEAYLSRLGV.		
Formulation	The UMPS solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 2M Urea and 20% glycerol.		

Introduction

Uridine 5'-monophosphate synthase (UMPS), is a bifunctional enzyme that catalyzes the ultimate two steps of the de novo pyrimidine biosynthetic pathway. UMPS in eukaryotes links the orotate phosphoribosyltransferase and the orotidine-5 β -monophosphate (OMP) decarboxylase activities into a single protein. The harmony of these 2 enzymes is assumed to be stabilized the catalytic centers as a result of the low molar concentration of the protein in mammalian cells. mutations in this gene are the reason of inherited orotic aciduria disease.

Stability

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Background

UMPS Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 500 amino acids (1-480 a.a) and having a molecular mass of 54.3kDa. UMPS is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA