Human Guanosine Monophosphate Reductase 2

Human, GMPR2
Expressed in *E.Coli*
Cat. No. CBCRY17
Lot. No. (See product label)

BACKGROUND

Guanosine monophosphate reductase (GMPR) Catalyzes the irreversible NADPH-dependent deamination of GMP to IMP. It functions in the conversion of nucleobase, nucleoside and nucleotide derivatives of G to A nucleotides, and in maintaining the intracellular balance of A and G nucleotides. Plays a role in modulating cellular differentiation.

MOLECULAR DESCRIPTION

Protein classification: Oxidoreductase

Structure Weight: 161477.73 Da

Polymer: 1

Molecule: GMP reductase 2

Chains: A, B, C, D

Type: polypeptide (L)

Chain Length: 366 amino acids

CRYSTAL INFORMATION

PDB ID: 2A7R

MMDB ID: 37032

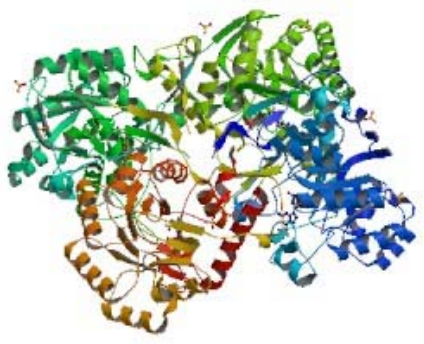
Source: E.Coli

Method: X-Ray Diffraction

Resolution: 3.0 Å

Ligand Chemical Component: guanosine-5'-monophosphate; sulfate ion

CRYSTAL STRUCTURE



GENE INFORMATION

Gene Name: GMPR2

Synonyms: MGC15084; MGC830; GMP reductase 2; guanosine 5'-monophosphate oxidoreductase 2; guanosine monophosphate reductase isolog; EC 1.7.1.7; guanosine monophosphate reductase 2

UniProt ID: Q9P2T1

GeneID: 51292

Chromosome Location: 14q12

Function: GMP reductase activity; metal ion binding; oxidoreductase activity; potassium ion binding

PRIMARY CITATION

Li, J., Wei, Z., Zheng, M., Gu, X., Deng, Y., Qiu, R., Chen, F., Ji, C., Gong, W., Xie, Y., Mao, Y. (2006) Crystal Structure of Human Guanosine Monophosphate Reductase 2 (GMPR2) in Complex with GMP J.Mol.Biol. 355: 980-988

FOR RESEARCH USE ONLY

45-16 Ramsey Road Shirley, NY 11967, USA
Tel: 1-866-588-6325 ·Fax:1-631-207-8356
E-mail: info@creative-biostructure.com
www.creative-biostructure.com