2,5-Diketo-D-Gluconic Acid Reductase A (dkgA) Escherichia Coli Recombinant Protein

PRODUCT OVERVIEW

Product Name	2,5-diketo-D-gluconic acid reductase A (dkgA), Recombinant Protein
Full Product Name	Recombinant Escherichia coli 2,5-diketo-D-gluconic acid reductase A (dkgA)
Product Gene Name	dkgA recombinant protein
Product Synonym Gene Name	dkgA
Sequence	MANPTVIKLQ DGNVMPQLGL GVWQASNEEV ITAIQKALEV GYRSIDTAAA YKNEEGVGKA LKNASVNREE LFITTKLWND DHKRPREALL DSLKKLQLDY IDLYLMHWPV PAIDHYVEAW KGMIELQKEG LIKSIGVCNF QIHHLQRLID ETGVTPVINQ IELHPLMQQR QLHAWNATHK IQTESWSPLA QGGKGVFDQK VIRDLADKYG KTPAQIVIRW HLDSGLVVIP KSVTPSRIAE NFDVWDFRLD KDELGEIAKL DQGKRLGPDP DQFGG
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degrees C. For long-term storage, store at -20 degrees C or -80 degrees C. Store working aliquots at 4 degrees C for up to one week. Repeated freezing and thawing is not recommended.
Molecular Weight	31,110 Da
Sequence Positions	1-275, full length protein
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
3D Structure	ModBase 3D Structure for Q46857
Species	Escherichia coli (strain K12)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for dkgA recombinant protein	MBS1341671 is a recombinant protein targeting dkgA. Also known as Recombinant Escherichia coli 2,5-diketo-D-gluconic acid reductase A (dkgA). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of dkgA recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for dkgA. It may not necessarily be applicable to this product.

NCBI GI #	90111527
NCBI GeneID	947495
NCBI Accession #	NP_417485.4
UniProt Primary Accession #	Q46857
UniProt Secondary Accession #	Q2M9I7

GenBank Nucleotide #	NC_000913.3
NCBI Official Full Name	2,5-diketo-D-gluconate reductase A
NCBI Official Symbol	dkgA
NCBI Official Synonym Symbols	ECK3004; JW5499; yqhE
UniProt Protein Name	2,5-diketo-D-gluconic acid reductase A
UniProt Synonym Protein Names	AKR5C
Protein Family	2,5-diketo-D-gluconic acid reductase
UniProt Gene Name	dkgA
UniProt Synonym Gene Names	yqhE; 2,5-DKG reductase A; 2,5-DKGR A; 25DKGR-A
NCBI Protein Information	2,5-diketo-D-gluconate reductase A
NCBI Summary for dkgA	DkgA has been shown to have a stereoselective beta-keto ester reductase and methylglyxoal reductase activity. [More information is available at EcoCyc: G7565].
UniProt Comments for dkgA	Catalyzes the reduction of 2,5-diketo-D-gluconic acid (25DKG) to 2-keto-L-gulonic acid (2KLG). It is also capable of stereoselective -keto ester reductions on ethyl acetoacetate and other 2-substituted derivatives.
Research Articles on dkgA	**1.** Purified enzymes encoded by yqhD and dkgA were shown to have NADPH-dependent furfural reductase activity.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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