

Transketolase 1 Recombinant Protein | tktA recombinant protein

Recombinant Escherichia coli (strain K12) Transketolase 1

CATALOG # AAA115599	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
-------------------------------	---

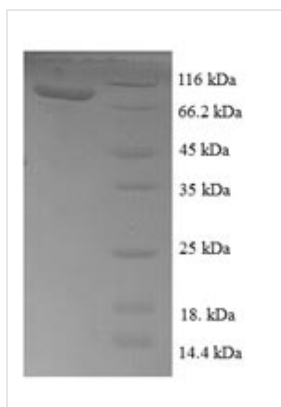
PRODUCT SYNONYMS

Transketolase 1; Recombinant Escherichia coli (strain K12) Transketolase 1; tktA recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	1-663aa; Full Length
Sequence	MSSRKELANA IRALSMDAVQ KAKSGHPGAP MGMADIAEVL WRDFLKHN PQ NPSWADRDRF VLSNGHGSML IYSLHLTG Y DLPMEELKNF RQLHSKTPGH PEVGYTAGVE TTTGPLGQGI ANAVGMAIAE KTLAAQFNRP GHDIVDHYTY AFMGDGCMM E GISHEVCSLA GTLKLGLIA FYDDNGISID GHVEGWFTDD TAMRFEAYGW HVIRIDIGHD AASIKRAVEE ARAVTDKPSL LMCKTIIGFG SPNKAGTHDS HGAPLGDAEI ALTREQLGWK YAPFEIPSEI YAQWDAKEAG QAKESAWNEK FAAYAKAYPQ EAAEFTRRMK GEMPSDFDAK AKEFIAKLQA NPAKIASRKA SQNAIEAFGP LLPEFLGGS A DLAPSNLTW SGSKAINEDA AGNYIHYGVR EFGMTAIANG ISLHGGFLPY TSTFLMFVEY ARNAVRMAAL MKQRQVMVYT HDSIGLGEDG PTHQPVEQVA SLRVTPNMST WRPCDQVESA VAWKYGVERQ DGPTALILSR QNLAQQERTE EQLANIARGG YVLKDCAGQP ELIFIATGSE VELAAAYEK LTAEGVKARV VSMPSTD AFD KQDAAYRESV LPKAVTARVA VEAGIADYWY KYVGLNGAIV GMTTFGESAP AELLFEEFGF TVDNVVAKAK ELL
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for tktA recombinant protein	Catalyzes the reversible transfer of a two-carbon ketol group from sedoheptulose-7-phosphate to glyceraldehyde-3-phosphate, producing xylulose-5-phosphate and ribose-5-phosphate. Catalyzes the transfer of a two-carbon ketol group from a ketose donor to an aldose acceptor, via a covalent intermediate with the cofactor thiamine pyrophosphate.
--	--

References	Nucleotide sequence of the Escherichia coli K-12 transketolase (tkt) gene.Sprenger G.A.Biochim. Biophys. Acta 1216:307-310(1993) Sprenger G.A.The complete genome sequence of Escherichia coli K-12.Blattner F.R., Plunkett G. III, Bloch C.A., Perna N.T., Burland V., Riley M., Collado-Vides J., Glasner J.D., Rode C.K., Mayhew G.F., Gregor J., Davis N.W., Kirkpatrick H.A., Goeden M.A., Rose D.J., Mau B., Shao Y.Science 277:1453-1462(1997) Escherichia coli K-12 a cooperatively developed annotation snapshot -- 2005.Riley M., Abe T., Arnaud M.B., Berlyn M.K.B., Blattner F.R., Chaudhuri R.R., Glasner J.D., Horiuchi T., Keseler I.M., Kosuge T., Mori H., Perna N.T., Plunkett G. III, Rudd K.E., Serres M.H., Thomas G.H., Thomson N.R., Wishart D., Wanner B.L.Nucleic Acids Res. 34:1-9(2006) Highly accurate genome sequences of Escherichia coli K-12 strains MG1655 and W3110.Hayashi K., Morooka N., Yamamoto Y., Fujita K., Isono K., Choi S., Ohtsubo E., Baba T., Wanner B.L., Mori H., Horiuchi T.Mol. Syst. Biol. 2:E1-E5(2006) Analysis and sequence of the speB gene encoding agmatine ureohydrolase, a putrescine biosynthetic enzyme in Escherichia coli.Szumanski M.B.W., Boyle S.M.J. Bacteriol. 172:538-547(1990) Lysine acetylation is a highly abundant and evolutionarily conserved modification in Escherichia coli.Zhang J., Sprung R., Pei J., Tan X., Kim S., Zhu H., Liu C.F., Grishin N.V., Zhao Y.Mol. Cell. Proteomics 8:215-225(2009) Transketolase A of Escherichia coli K12. Purification and properties of the enzyme from recombinant strains.Sprenger G.A., Schorken U., Sprenger G., Sahm H.Eur. J. Biochem. 230:525-532(1995) Crystal structure of Escherichia coli transketolase.Isupov M.N., Rupprecht M.P., Wilson K.S., Dauter Z., Littlechild J.A.Submitted (APR-1999) to the PDB data bankStrain and near attack conformers in enzymic thiamin catalysis X-ray crystallographic snapshots of bacterial transketolase in covalent complex with donor ketoses xylulose 5-phosphate and fructose 6-phosphate, and in noncovalent complex with acceptor aldose ribose 5-phosphate.Asztalos P., Parthier C., Golbik R., Kleinschmidt M., Hubner G., Weiss M.S., Friedemann R., Wille G., Tittmann K.Biochemistry 46:12037-12052(2007)
-------------------	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	446020759
NCBI GeneID	947420
NCBI Accession #	WP_000098614.1
NCBI GenBank Nucleotide #	WP_000098614.1
UniProt Accession #	P27302 ; Q2M9Q8 ; Q6BF59
Molecular Weight	88.2 kDa
NCBI Official Full Name	MULTISPECIES: transketolase
NCBI Official Symbol	tktA
NCBI Official Synonym Symbols	ECK2930; JW5478; tkt
NCBI Protein Information	transketolase 1, thiamine triphosphate-binding
UniProt Protein Name	Transketolase 1
UniProt Gene Name	tktA
UniProt Synonym Gene Names	tkt; TK 1
UniProt Entry Name	TKT1_ECOLI

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://www.aaabiotech.com/tktA-recombinant-protein-e-coli/115599>