

3-dehydroquinate dehydratase Recombinant Protein | *aroD* recombinant protein

Recombinant *Salmonella typhi* 3-dehydroquinate dehydratase

CATALOG # AAA114655	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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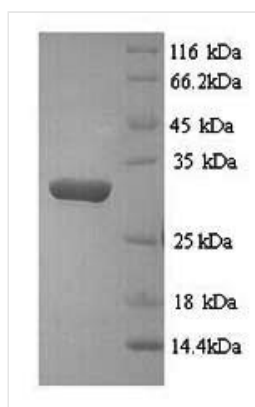
PRODUCT SYNONYMS

3-dehydroquinate dehydratase; Recombinant *Salmonella typhi* 3-dehydroquinate dehydratase; Type I DHQase; *aroD* 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	1-252aa; Full Length
Sequence	MKTVTVKNLI IGEGMPKIIV SLMGRDINSV KAEALAYREA TFDILEWRVD HFMDIASTQS VLTAARVIRD AMPDIPLLFT FRSAGEGGEQ TITTQHYLTL NRAAIDSLV DMIDLELFTG DADVKATVDY AHAHNVYVVM SNHDFHQTPS AEEMVLRLRK MQALGADIPK IAVMPQSKHD VLTLLTATLE MQQHYADRPV ITMSMAKEGV ISRLAGEVFG SAATFGAVKQ ASAPGQIAVN DLRSVLMILH NA
Sequence Length	252
Production Note	Special Offer: The Yeast host-expressed protein is manufactured from a stock plasmid containing the protein gene. Yeast host-expressed protein is stocked in different unit sizes ranging from as small as 10 ug to as large as 1 mg. Bulk inventory is also available. The Yeast host-expressed protein has been ordered over and over again by researchers and has stood the test of time as both a robust protein and important target for the research community. It is part of our new program to make our most popular protein targets and corresponding hosts available in expanded unit sizes and with a quick processing time. Select Yeast host-expressed protein for the fastest delivery among all hosts. Please contact our or email to for more details.
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 aroD recombinant protein	Involved in the third step of the chorismate pathway, which leads to the biosynthesis of aromatic amino acids. Catalyzes the cis-dehydration of 3-dehydroquinate (DHQ) and introduces the first double bond of the aromatic ring to yield 3-dehydroshikimate. The reaction involves the formation of an imine intermediate between the keto group of 3-dehydroquinate and the epsilon-amino group of Lys-170 at the active site.
References	Molecular cloning and characterization of the aroD gene encoding 3-dehydroquinase from Salmonella typhi.Servos S., Chatfield S., Hone D., Levine M., Dimitriadis G., Pickard D., Dougan G., Fairweather N., Charles I.G.J. Gen. Microbiol. 137:147-152(1991) Complete genome sequence of a multiple drug resistant Salmonella enterica serovar Typhi CT18.Parkhill J., Dougan G., James K.D., Thomson N.R., Pickard D., Wain J., Churcher C.M., Mungall K.L., Bentley S.D., Holden M.T.G., Sebaihia M., Baker S., Basham D., Brooks K., Chillingworth T., Connerton P., Cronin A., Davis P., Davies R.M., Dowd L., White N., Farrar J., Feltwell T., Hamlin N., Haque A., Hien T.T., Holroyd S., Jagels K., Krogh A., Larsen T.S., Leather S., Moule S., O'Gaora P., Parry C., Quail M.A., Rutherford K.M., Simmonds M., Skelton J., Stevens K., Whitehead S., Barrell B.G.Nature 413:848-852(2001) Comparative genomics of Salmonella enterica serovar Typhi strains Ty2 and CT18.Deng W., Liou S.-R., Plunkett G. III, Mayhew G.F., Rose D.J., Burland V., Kodoyianni V., Schwartz D.C., Blattner F.R.J. Bacteriol. 185:2330-2337(2003) The two types of 3-dehydroquinase have distinct structures but catalyze the same overall reaction.Gourley D.G., Shrive A.K., Polikarpov I., Krell T., Coggins J.R., Hawkins A.R., Isaacs N.W., Sawyer L.Nat. Struct. Biol. 6:521-525(1999) Comparison of different crystal forms of 3-dehydroquinase from Salmonella typhi and its implication for the enzyme activity.Lee W.H., Perles L.A., Nagem R.A., Shrive A.K., Hawkins A., Sawyer L., Polikarpov I.Acta Crystallogr. D 58:798-804(2002) Insights into substrate binding and catalysis in bacterial type I dehydroquinase.Maneiro M., Peon A., Lence E., Otero J.M., Van Raaij M.J., Thompson P., Hawkins A.R., Gonzalez-Bello C.Biochem. J. 462:415-424(2014)

NCBI AND UNIPROT INFORMATION

NCBI GeneID	1248131
UniProt Accession #	P24670
Molecular Weight	29.6 kDa
NCBI Official Symbol	aroD
NCBI Protein Information	3-dehydroquinate dehydratase
UniProt Protein Name	3-dehydroquinate dehydratase
UniProt Gene Name	aroD
UniProt Synonym Gene Names	DHQ1
UniProt Entry Name	AROD_SALTI

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.