

Peptide deformylase Recombinant Protein | def recombinant protein

Recombinant Escherichia coli Peptide deformylase

CATALOG # AAA18692	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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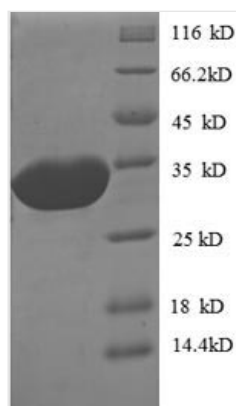
PRODUCT SYNONYMS

Peptide deformylase; Recombinant Escherichia coli Peptide deformylase; Polypeptide deformylase; def 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	2-169aa; Full Length of Mature Protein
Sequence	SVLQVLHIPD ERLRKVAKPV EEVNAEIQRI VDDMFETMYA EEGIGLAATQ VDIHQRIIVI DVSENORDERL VLINPELLEK SGETGIEEGC LSIPEQRALV PRAEKVKIRA LDRDGKPFEL EADGLLAICI QHEMDHLVGK LFMDYLSPLK QQRIRQKVEK LDRLKARA
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 def recombinant protein	Removes the formyl group from the N-terminal Met of newly synthesized proteins. Requires at least a dipeptide for an efficient rate of reaction. N-terminal L-methionine is a prerequisite for activity but the enzyme has broad specificity at other positions.
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References
Genetic characterization of polypeptide deformylase, a distinctive enzyme of eubacterial translation.Mazel D., Pochet S., Marliere P.EMBO J. 13:914-923(1994) Disruption of the gene for Met-tRNA(fMet) formyltransferase severely impairs growth of Escherichia coli.Guillon J.-M., Mechulam Y., Schmitter J.-M., Blanquet S., Fayat G.J. Bacteriol. 174:4294-4301(1992) 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) 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) The Escherichia coli fnt gene, encoding methionyl-tRNA(fMet) formyltransferase, escapes metabolic control.Meinzel T., Guillon J.-M., Mechulam Y., Blanquet S.J. Bacteriol. 175:993-1000(1993) Enzymatic properties of Escherichia coli peptide deformylase.Meinzel T., Blanquet S.J. Bacteriol. 177:1883-1887(1995) Isolation and crystallization of functionally competent Escherichia coli peptide deformylase forms containing either iron or nickel in the active site.Groche D., Becker A., Schlichting I., Kabsch W., Schultz S., Wagner A.F.Biochem. Biophys. Res. Commun. 246:342-346(1998) A new subclass of the zinc metalloproteases superfamily revealed by the solution structure of peptide deformylase.Meinzel T., Blanquet S., Dardel F.J. Mol. Biol. 262:375-386(1996) Solution structure of nickel-peptide deformylase.Dardel F., Ragusa S., Lazennec C., Blanquet S., Meinzel T.J. Mol. Biol. 280:501-513(1998) Crystal structure of the Escherichia coli peptide deformylase.Chan M.K., Gong W., Rajagopalan P.T.R., Hao B., Tsai C.M., Pei D.Biochemistry 36:13904-13909(1997) ErratumChan M.K., Gong W., Rajagopalan P.T.R., Hao B., Tsai C.M., Pei D.Biochemistry 37:13042-13042(1998) Structure of peptide deformylase and identification of the substrate binding site.Becker A., Schlichting I., Kabsch W., Schultz S., Wagner A.F.J. Biol. Chem. 273:11413-11416(1998) Iron center, substrate recognition and mechanism of peptide deformylase.Becker A., Schlichting I., Kabsch W., Groche D., Schultz S., Wagner A.F.Nat. Struct. Biol. 5:1053-1058(1998) Structural basis for the design of antibiotics targeting peptide deformylase.Hao B., Gong W., Rajagopalan P.T.R., Zhou Y., Pei D., Chan M.K.Biochemistry 38:4712-4719(1999)

NCBI AND UNIPROT INFORMATION

NCBI GI #	16131166
NCBI GeneID	947780
NCBI Accession #	NP_417745.1
NCBI GenBank Nucleotide #	NC_000913.3
UniProt Accession #	P0A6K3; P27251; Q2M6V1; CAA54826
Molecular Weight	21.2 kDa
NCBI Official Full Name	peptide deformylase
NCBI Official Symbol	def
NCBI Official Synonym Symbols	ECK3273; fms; JW3248
NCBI Protein Information	peptide deformylase
UniProt Protein Name	Peptide deformylase
UniProt Gene Name	def
UniProt Synonym Gene Names	fms; PDF
UniProt Entry Name	DEF_ECOLI

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