Datasheet for ABIN2452182

RuvA Protein

2 Publications

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Overview

Quantity:	20 µg
Target:	RuvA
Origin:	E. coli
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Functional Studies (Func)

Product Details

Characteristics:	The product is a recombinant protein abundantly expressed by E. coli and purified by methods such as chromatography. The molecular weight is 22 kD and even in solution, it binds to the Holliday structure and form a tetramer.
Purity:	> 90 % by SDS-PAGE (CBB staining)

Target Details

Target:	RuvA
Abstract:	RuvA Products
Background:	E. coli RuvA protein binds specifically to the Holliday structure which is the intermediate of recombination at the late stage of homologous recombination and recombination repair and forms a complex with RuvB motor protein allowing the migration of Holliday junction using ATP hydrolysis energy and expands the heteroduplex region. In solution, it forms a tetramer and

Target Details

	binds to the cross-like DNA of the Holliday junction from below and above holding it in between.
UniProt:	P0A809

Application Details

Application Notes:	1) Functional as Holliday junction specific binding protein,which promotes Holliday-junction branch migration in combination with RuvB protein. 2) For SNP analysis (Genome Research 13:1754-1764 PMID: 12840050).
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	2.7 mg/mL
Buffer:	50 % glycerol, 10 mM Tris-HCl (pH 7.5), 2 mM EDTA, 100 mM NaCl, 5 mM mercaptoethanol
Storage:	-20 °C

Publications

Product cited in:	Han, Tani, Hayashi, Hishida, Iwasaki, Shinagawa, Harada: "Direct observation of DNA rotation during branch migration of Holliday junction DNA by Escherichia coli RuvA-RuvB protein complex." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 103, Issue 31, pp. 11544-8, (2006) (PubMed). Iwasaki, Takahagi, Nakata, Shinagawa: "Escherichia coli RuvA and RuvB proteins specifically interact with Holliday junctions and promote branch migration." in: **Genes & development**, Vol. 6, Issue 11, pp. 2214-20, (1992) (PubMed).