Datasheet for ABIN2452184

RuvB (Active) Protein

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Overview

Quantity:	20 µg
Target:	RuvB
Origin:	E. coli
Source:	Escherichia coli (E. coli)
Protein Type:	Native
Biological Activity:	Active
Application:	SDS-PAGE (SDS), Functional Studies (Func), ELISA, Western Blotting (WB)

Product Details

Characteristics:	Full-length recombinant protein expressed in E.coli and highly purified by combined chromatography. RuvB protein is over 90 % by SDS-PAGE (CBB staining) pure.

Target Details

Target:	RuvB
Background:	E. coli RuvB protein forms a complex with RuvA protein at the late stage of homologous recombination and recombination repair and binds specifically to the Holliday structure which is the intermediate of recombination, allowing the migration of Holliday junction using ATP hydrolysis energy and expands the heteroduplex region. RuvB forms a hexamer ring structure and surrounds the double chain DNA and covers RuvA tetramer bound to the Holliday junction from both sides. RuvB is a DNA motor protein which possesses the ATPase activity, activated by DNA and RuvA protein. Its molecular weight is 37 kD and forms a dimer in solution in the physiological condition. .

Target Details

UniProt:	P0A812

Application Details

Application Notes:	1) Functional studies in vitro,RuvA and RuvB form a complex that promotes Holiday junction (a recombination intermediatae) branch-migration by using ATP hydrolysis energy. RuvB also has ATPase activity which is stimulated by RuvA and DNA. 2) SDS-PAGE (0. 2 g/lane) 3) Standard antigen for western blotting and ELISA
Restrictions:	For Research Use only

Handling

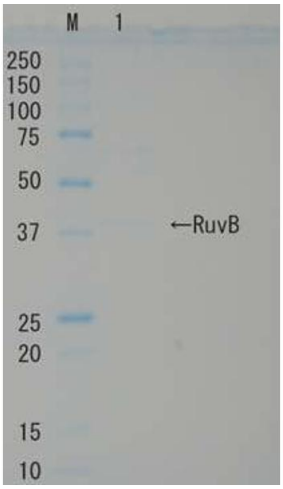
Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	50 % glycerol, 10 mM Tris-HCl (pH 7.5), 2 mM EDTA, 100 mM NaCl, 5 mM mercaptoethanol
Storage:	-20 °C/-80 °C
Storage Comment:	Upon arrival centrifuge briefly and store at -20 C or at -80 C for longer storage.

Publications

Product cited in:	Shinagawa, Iwasaki: "Processing the holliday junction in homologous recombination." in: **Trends in biochemical sciences**, Vol. 21, Issue 3, pp. 107-11, (1996) (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).

SDS-PAGE

Image 1.



SDS-PAGE

Image 2.

Fig.1 Polyacrylamide gel electrophoresis of RuvB protein.

SDS-PAGE

Image 3.