abcam

Product datasheet

Recombinant E. coli RuvB protein (Active) ab63827

2 图像

描述

产品名称 重组E. coli RuvB蛋白(Active)

纯**度** > 90 % SDS-PAGE.

purified by methods such as chromatography

表达系统 Escherichia coli

蛋白长度 Full length protein

无动物成分 No

性质 Recombinant

种属 Escherichia coli

描述 重组*E. coli* RuvB蛋白(Active)

技术指标

Our Abpromise guarantee covers the use of ab63827 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应**用** SDS-PAGE

Functional Studies

Western blot

ELISA

形式 Liquid

补充说明 This protein can be used for:- 1) Studies on homologous recombination mechanism. 2) To make

use of the motor protein function that specifically migrates the Holliday junction by forming a

complex with RuvA (branch-migration protein).

制备和贮存

稳定性和存储 Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

pH: 6

Constituents: 0.039% Beta mercaptoethanol, 0.158% Tris HCl, 0.0584% EDTA, 50% Glycerol

(glycerin, glycerine), 0.58% Sodium chloride

1

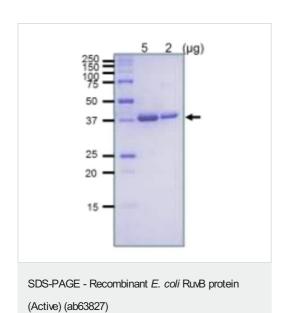
相关性

In Escherichia coli, the RuvA, RuvB and RuvC proteins are required for the late stages of homologous recombination and DNA repair. They are involved in processing the Holliday junction during homologous recombination. RuvA protein binds to both single-stranded and double-stranded DNA. RuvB protein has weak ATPase activity. RuvA bound to DNA greatly enhances ATPase activity of RuvB. UV-irradiation to supercoiled DNA further enhances the stimulatory effect of RuvA on the RuvB ATPase activity. In the presence of ATP the RuvA-RuvB complex has an activity that renatures cruciform structures formed by heating and gradually cooling supercoiled DNA with an inverted repeat. RuvA and RuvB promote branch migration whereas RuvC resolves junctions by endonucleolytic cleavage. Moreover RuvAB stimulate Holliday junction resolution by RuvC. The RuvA-RuvB complex interacts with an irregular conformation in damaged DNA and induces conformational changes in DNA using energy provided by ATP hydrolysis, so that it facilitates DNA repair, recombination and error prone replication. RuvABC proteins are responsible for the occurrence of DSBs at arrested replication forks. In cells proficient for RecBC,RuvAB is uncoupled from RuvC and DSBs may be prevented.

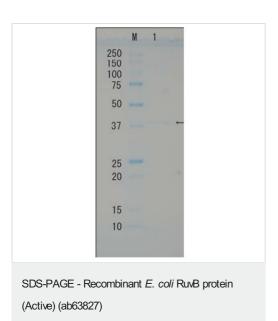
细胞定位

Cell Membrane, Cytoplasmic and Nuclear

图片



SDS-PAGE analysis of Recombinant *E. coli* RuvB protein (ab63827).



SDS Page analysis of ab63827

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