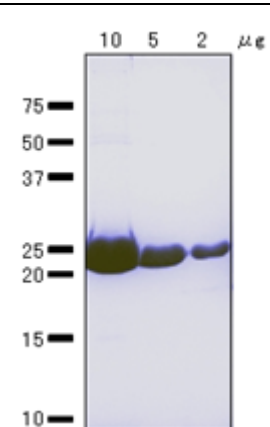


E. coli RuvA Protein, Functional

Product code	01-007 01-008
Size	20 µg 100 µg
Storage	-20°C -80°C (for longer storage) Avoid freeze-thaw cycles
Product Description	Recombinant full-length <i>E. coli</i> RecQ protein. The molecular weight of the monomer is 22 kD.
Concentration	1.0 ~ 2.7 mg/ml (as determined by BCA method)
Buffer	10 mM Tris-HCl (pH 7.5), 2 mM EDTA, 100 mM NaCl, 5 mM 2-Mercaptoethanol, 50 % Glycerol
Purity	Over 95% by SDS-PAGE
Application	1. Functional as Holliday junction specific binding protein, which promotes Holliday-junction branch migration in combination with RuvB protein. 2. For SNP analysis (<i>Genome Research</i> 13 :1754-1764 PMID: 12840050).
Activity	Unwinding duplex DNA, dependent on ATP. DNA-dependent ATPase (Ref.2).
Background	<i>E. coli</i> 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 binds to the cross-like DNA of the Holliday junction from below and above holding it in between (1, 2).
Image	 Figure SDS-Polyacrylamide gel electrophoresis of RuvA protein. 22.1 kDa Related Products: 01-007 -008 <i>E. coli</i> RuvA Protein 01-009 <i>E.coli</i> RuvB protein 01-011 <i>E.coli</i> RuvC protein 61-005 Anti-<i>E.coli</i> RuvA antibody, rabbit serum 61-007 anti-RuvB antibody, rabbit polyclonal 61-009 Anti-<i>E.coli</i> RuvC antibody, rabbit serum
Data Link	UniProtKB: P0A809 (RUVA_ECOLI)
References	This protein has been used in the following publications. - Han YW et al (2006) Direct observation of DNA rotation during branch migration of Holliday junction DNA by Escherichia coli RuvA-RuvB protein complex. <i>Proc Natl Acad Sci U S A.</i> 2006 Aug 1;103(31):11544-8. PMID: 16864792 Functional - Iwasaki H et al (1992) Escherichia coli RuvA and RuvB proteins specifically interact with Holliday junctions and promote branch migration. <i>Genes Dev</i> 6:2214-2220 PMID: 1427081 Functional
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	