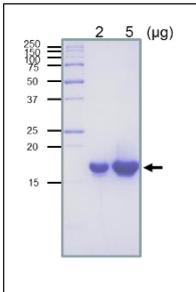


## *E. coli* RuvC Protein, Functional

<b>Product code</b>	01-011                      01-012
<b>Size</b>	20 µg                              100 µg
<b>Storage</b>	-20°C   -80°C (for longer storage)    Avoid freeze-thaw cycles
<b>Product Description</b>	Recombinant <i>E. coli</i> full-size RuvC protein without tag.
<b>Concentration</b>	1.0 mg/ml (as determined by BCA method)
<b>Buffer</b>	50% glycerol, 10 mM Tris-HCl (pH7.5), 2 mM EDTA, 100 mM NaCl, 5 mM 2-mercaptoethanol
<b>Purity</b>	Over 95% by SDS-PAGE
<b>Application</b>	<ol style="list-style-type: none"> <li>1. Functional studies in vitro. RuvC cleaves recombination intermediate at Holliday Junction.</li> <li>2. Standard antigen for western blotting and ELISA.</li> <li>3. SDS-PAGE</li> </ol>
<b>Activity</b>	Unwinding duplex DNA, dependent on ATP. DNA-dependent ATPase (Ref.2).
<b>Background</b>	<i>E. coli</i> RuvC protein (19 kDa) is a structurally specific endonuclease which binds specifically to the Holliday structure, an intermediate of recombination, at the late stage of homologous recombination and recombination repair and introduces a nick in the symmetrical point of the Holliday junction cleaving and resolving the recombinant (1, 2).
<b>Image</b>	 <p><b>Figure</b> SDS-PAGE analysis of the purified RuvC protein. 19 kDa</p>
<b>Data Link</b>	UniProtKB: <a href="https://www.uniprot.org/uniprot/P0A814">P0A814</a> (RUVC_ECOLI)
<b>References</b>	<p>This product was used in Ref. 2 and 3.</p> <ol style="list-style-type: none"> <li>1. Shinagawa H and Iwasaki H (1996) "Processing the holliday junction in homologous recombination." <i>Trend Biochem. Sci.</i> <b>21</b>:107-111 PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/8882584/">8882584</a> <b>Review</b></li> <li>2. Iwasaki H <i>et al.</i> (1991) "Escherichia coli RuvC protein is an endonuclease that resolves the Holliday structure." <i>EMBO J</i> <b>10</b>:4381-4389 (1991) PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/1661673/">1661673</a> <b>Biochemistry</b></li> <li>3. Murayama Y. <i>et al.</i> (2008) "Formation and branch migration of Holliday junctions mediated by eukaryotic recombinases." <i>Nature</i> <b>451</b>:1018-1021 PMID: <a href="https://pubmed.ncbi.nlm.nih.gov/18256600/">18256600</a> <b>Biochemistry</b></li> </ol>
<b>Related product</b>	01-007 <i>E.coli</i> RuvA protein                      01-009 <i>E.coli</i> RuvB protein 61-005 anti-RuvA antibody, rabbit polyclonal    61-007 anti-RuvB antibody, rabbit polyclonal 61-009 anti-RuvC antibody, rabbit polyclonal
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	