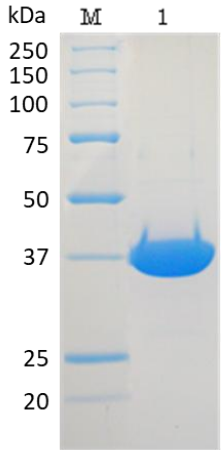


DNA polymerase β (rat)

Product code	10-101 10-102
Size	20 μ g 100 μ g
Storage	-80°C Avoid freeze-thaw cycles.
Product Description	This product is highly purified full-length rat DNA polymerase β overproduced in <i>E. coli</i> with high enzymatic activity without any tag attached (ref.2). The enzyme has molecular mass of 38 kDa (Fig.1). The amino acid sequence of the rat enzyme has 86% identity to the human homolog.
Concentration	1.3 mg/ml
Buffer	50mM Tris-HCl pH7.6, 0.3M KCl, 0.1mM EDTA, 1mM DTT, 20% glycerol
Enzyme Activity	90 unit/ μ l (1 unit of the enzyme activity incorporates 1 nanomole of dNTP into acid-insoluble fraction at 37°C in 60 min.)
Purity	Over 95% purity by SDS-PAGE analysis
Application	1. For the studies on the mechanisms of base-excision repair of DNA damage 2. As a positive control for Western blotting with anti-DNA polymerase β antibody
Background	DNA polymerase β is a distributive polymerase involved in base excision repair which repairs damaged DNA by excising modified bases (oxidized, methylated, deaminated etc.) (ref. 1).
	 <p>Fig.1 SDS-PAGE analysis of DNA polymerase β Lane1: DNA polymerase β (rat)</p>
Data Link	UniProtKB: P06766 (DPOLB_RAT)
References	This product is described and produced as in Ref 2 1. Friedberg EC <i>et al</i> <i>DNA Repair and Mutagenesis</i> 2 nd ed., ASM Press (2006) 2. Date T et al “Expression of active rat DNA polymerase beta in Escherichia coli.” <i>Biochemistry</i> 27: 2983-2990 (1988) PMID: 3042024
Related product	70-041 Anti-DNA polymerase β antibody, rabbit polyclonal
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	