

Recombinant Human POLA1 protein

Cat. No. POLA-938H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human POLA1 protein was isolated from HeLa cells.
Species	Human
Source	HeLa
Description	Human DNA Polymerase Alpha is a replication enzyme used to test the toxicity of drugs on key human replication systems. The simplest DNA Polymerase known in both size and catalysis. Replication enzyme involved in initiation of DNA replication in eukaryotes. A multi-subunit complex, which inhibits DNA polymerase and primase activities.
Form	20 mM Tris-HCl (pH 8.0), 0.25 mM EDTA, 50 mM NaCl, 1 mM β -mercaptoethanol, 0.1% Triton X-100™, 50% (v/v) glycerol
Unit Definition	One unit is the amount of enzyme required to incorporate 1 nmole of total nucleotide into acid-insoluble form in 60 minutes at 37 centigrade.
Applications	1. Used to test in vitro replication capabilities along with other enzymes.2. Used to test the toxicity of drugs on key human replication systems.3. Used in DNA replication experiments.
Storage	Store at -80 centigrade long term;Store at -20 centigrade short term.

GENE INFORMATION

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Gene Name	POLA1 polymerase (DNA directed), alpha 1, catalytic subunit [Homo sapiens]
Official Symbol	POLA1
Synonyms	POLA1; polymerase (DNA directed), alpha 1, catalytic subunit; POLA, polymerase (DNA directed), alpha , polymerase (DNA directed), alpha 1; DNA polymerase alpha catalytic subunit; p180; DNA polymerase alpha p180 subunit; polymerase (DNA-directed), alpha (70kD); DNA polymerase alpha 1 catalytic subunit; DNA polymerase alpha catalytic subunit p180; POLA; DKFZp686K1672;
Gene ID	5422
mRNA Refseq	NM_016937
Protein Refseq	NP_058633
MIM	312040
UniProt ID	P09884
Chromosome Location	Xp22.1-p21.3
Pathway	Activation of the pre-replicative complex, organism-specific biosystem; Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Chromosome Maintenance, organism-specific biosystem; DNA Replication, organism-specific biosystem; DNA Replication, organism-specific biosystem; DNA Replication Pre-Initiation, organism-specific biosystem;
Function	DNA binding; DNA binding; contributes_to DNA primase activity; DNA-directed DNA polymerase activity; DNA-directed DNA polymerase activity; chromatin binding;

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

double-stranded DNA binding; metal ion binding; nucleoside binding; nucleotide binding; nucleotidyltransferase activity; protein binding; protein heterodimerization activity; purine nucleotide binding; pyrimidine nucleotide binding; transferase activity;

Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA