

Product Name	Recombinant Human DNA polymerase theta (POLQ) - C terminal Domain	<p>SDS-PAGE gel</p>
Synonym(s)	DNA polymerase theta, POL θ , POLH, DinB homolog, DNA polymerase q	
Quantity	20 ug, 100 ug, 1 mg	
Species	Human	
Tag	No tag	
Molecular weight	90.97 kDa	
Purity	>98% by SDS-PAGE	
GenBank Accession	NM_199420.4	
UniProt #	O75417, a. a. 1792-2590	
Expression Source	E. coli	
Application	DNA polymerase activity assay, Inhibitor screening for drug discovery, DNA repair mechanisms study	
Formulation	40 mM Tris pH 8.0, 150 mM KCl, 150 mM ammonium acetate, 10% glycerol, 1 mM TCEP, 1 mM PMSF, 1 mM Benzamidine	
Storage and Stability	Stable for 12 months at -80°C, Avoid freeze/thaw cycles	M – MW Marker 1, 2 – POLQ-CTD
Description	<p>The Pol Theta C-terminal domain refers to a specific region found in the DNA polymerase theta enzyme (Pol θ). Pol θ is a specialized DNA polymerase that plays a role in DNA repair processes, particularly in the repair of double-stranded DNA breaks.</p> <p>The C-terminal domain of Pol θ is located at the end of the enzyme's protein chain and is involved in various functions related to DNA repair. It contains specific motifs and regions that interact with other proteins and DNA molecules to facilitate repair processes.</p>	
Reference	<p>Monica Bubenik, et al., Identification of RP-6685, an Orally Bioavailable Compound that Inhibits the DNA Polymerase Activity of Polθ. <i>J Med Chem.</i> 2022 Oct 13;65(19):13198-13215.</p> <p>Gonzalo Rodriguez-Berriguete, et al., Small-Molecule Polθ Inhibitors Provide Safe and Effective Tumor Radiosensitization in Preclinical Models. <i>Clin Cancer Res.</i> 2023 Apr 14; 29(8): 1631–1642.</p>	

Related products:

<u>Product Name</u>	<u>Catalog #</u>	<u>Size</u>
DNA Polymerase Theta Activity Assay Kit	362101	96 reactions

eIF4E/eIF4G Binding Assay Kit	34343-BK	384 reactions
T7 RNA polymerase	777627	5000 U, 25000U, 100000U
T7 High Yield RNA Synthesis Kit	777627-RK	25 rxns, 50 rxns, 100 rxns
Kras Wild Type (WT), GST-tag	5727-4121G	50 µg, 100 µg
Kras WT, GST-tag, GDP Loaded	5727-WTG-G	50 µg, 100 µg
Kras WT, GST-tag, GppNHP loaded	5727-WTG-GP	50 µg, 100 µg
Kras G12C, His-tag	5727-4122H	50 µg, 100 µg
Kras G12C, GST-tag	5727-4122G	50 µg, 100 µg
Kras G12C, GST-tag, GDP Loaded	5727-4122G -G	50 µg, 100 µg
Kras G12C, GST-tag, GppNHP loaded	5727-4122G -GP	50 µg, 100 µg
Kras G12D, GST-tag	5727-4123G	50 µg, 100 µg
Kras G12D, GST-tag, GDP Loaded	5727-4123G -G	50 µg, 100 µg
Kras G12D, GST-tag, GppNHP loaded	5727-4123G -GP	50 µg, 100 µg
Kras G12R, GST-tag,	5727-4127G	50 µg, 100 µg
Kras G12R, GST-tag, GDP Loaded	5727-4127G -G	50 µg, 100 µg
Kras G12R, GST-tag, GppNHP loaded	5727-4127G -GP	50 µg, 100 µg
Kras G12V, GST-tag,	5727-4128G	50 µg, 100 µg
Kras G12V, GST-tag, GDP Loaded	5727-4128G -G	50 µg, 100 µg
Kras G12V, GST-tag, GppNHP loaded	5727-4128G -GP	50 µg, 100 µg
Kras WT Nucleotide Exchange Assay Kit	5727-4121NK	384 reactions
Kras G12C Nucleotide Exchange Assay Kit	5727-4122NK	384 reactions
Kras G12D Nucleotide Exchange Assay Kit	5727-4123NK	384 reactions
Kras G12R Nucleotide Exchange Assay Kit	5727-4127NK	384 reactions
Kras G12V Nucleotide Exchange Assay Kit	5727-4128NK	384 reactions
Kras WT – cRAF Binding Assay Kit	5727-4121BK	384 reactions
Kras G12C – cRAF Binding Assay Kit	5727-4122BK	384 reactions
Kras G12D– cRAF Binding Assay Kit	5727-4123BK	384 reactions
Kras G12R – cRAF Binding Assay Kit	5727-4127BK	384 reactions
Kras G12V – cRAF Binding Assay Kit	5727-4128BK	384 reactions
Human RBD-RAF1, N-His tag, C-FLAG tag	7237231	50 µg, 100 µg

Human SOS1, No Tag	7671	50 µg, 100 µg
Human SOS1, His-Avi-Tag	7671HA	50 µg, 100 µg
Recombinant SARS-CoV-2 Mpro, 3CL protease	728201	50 ug, 500 ug
SARS-CoV-2 Mpro (3CL Protease) Assay Kit	728203	96 reactions
Recombinant SARS-CoV-2 Papain-like Protease (PLpro, NSP3), CF	728251	50 ug, 100 ug, 1mg
Papain-like (PLpro) Protease Assay Kit	728253	96 reactions
Recombinant SARS-CoV-2 Helicase (NSP13)	728231	10 ug, 50 ug, 100 ug
Recombinant SARS-CoV-2 NSP7	728264	100 ug, 1mg
Recombinant SARS-CoV-2 NSP8	728265	100 ug, 1mg
TEV-His	190001-R	1,000 Units, 10,000 Units
Recombinant SUMO Protease (Ulp1)	190003	1,000 units, 10,000 units
PreScission Protease (HRV 3C)	190002-R	1,000 units, 10,000 units
Recombinant YopH	200100	10 ug, 20 ug, 100 ug, 1 mg
Recombinant Mouse Leukemia Inhibitory Factor (mLIF)	11-0001	10 ug, 100 ug
Recombinant Human LIF	12-0002	10 ug, 100 ug, 1 mg
Recombinant Human LIF, Animal-Free	12-0002AFR	10 ug, 100 ug, 1 mg
Recombinant Human FGF-basic, Carrier-free	12-0005CFR	50 ug, 100 ug, 500 ug, 1 mg
Recombinant Human BCL2	225201	100 ug
GST-CDK2: His-CyclinE1	C352E1	10 ug, 100 ug
GST-CDK2: His-CyclinA2	C352A2	10 ug, 100 ug
Recombinant Human Malic enzyme 1 (ME1)	180001	10 ug, 25 ug, 100 ug, 1 mg

Recombinant Human Malic enzyme 2 (ME2)	180002	10 ug, 25 ug, 100 ug, 1 mg
Recombinant Human Malic enzyme 3 (ME3)	180003	10 ug, 25 ug, 100 ug, 1 mg

Products are for research use only and are not intended for human use. We do not sell to patients.