

Related products

Product	Amount	Cat. no.
Anza™ T4 DNA Ligase Master Mix	50 reactions	IVGN210-4
Anza™ Alkaline Phosphatase Kit	500 reactions	IVGN220-4
Anza™ DNA Blunting Kit	100 reactions	IVGN240-4
Anza™ DNA End Repair Kit	20 reactions	IVGN250-4
PureLink™ PCR Purification Kit	50 preps	K3100-01
One Shot™ TOP10 Chemically Competent <i>E. Coli</i>	20 reactions	C4040-03
One Shot™ INV110 Chemically Competent <i>E. Coli</i>	20 reactions	C7171-03

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ThermoFisher
S C I E N T I F I C

Anza™ T4 PNK Kit (10 U/μL)

Cat. No.	Size	Lot no.	Exp. Date
IVGN230-4	50 reactions		

Publication No. MAN0014311 Rev. B.0

Product description The Invitrogen™ Anza™ T4 PNK (polynucleotide kinase) Kit is used to perform 5'-phosphorylation of DNA and oligonucleotides.

The T4 PNK enzyme exhibits 5' polynucleotide kinase, and 3' phosphatase activity. It catalyzes the transfer of the terminal phosphate of ATP to a 5' hydroxyl group of a nucleic acid.

Components	Amount	Units
Anza™ T4 PNK Enzyme	50 μL	500
Anza™ 10X T4 PNK Buffer	500 μL	—

Storage Store at -20°C.

For research use only. Not for use in diagnostic procedures.

General guidelines

- Perform protocol with linear double-stranded DNA (0.2–1 µg), or oligonucleotides (10–50 pmol).
- Phosphorylation can be performed with DNA or oligonucleotides in water, TE, or 1X Anza™ buffers.

DNA phosphorylation protocol

Use this protocol to perform 5' phosphorylation of DNA, oligonucleotides, or RNA.

1. Prepare a reaction mix by adding the reagents listed in the following table to a clean microcentrifuge tube:

Reagent	Volume
Nuclease-free water	As required to reach final reaction volume
DNA insert	0.2–1 µg
Anza™ 10X PNK Buffer	2 µL
Anza™ T4 PNK Enzyme	1 µL
Final reaction volume	20 µL

2. Mix reagents by pipetting up and down.
3. Incubate at 20°C for 15 minutes.
4. Heat inactivate enzyme by incubating at 80°C for 5 minutes.
5. Ligate insert and vector using the Anza™ T4 DNA Ligase Master Mix.
6. Use 1–5 µL of the ligation reaction mixture to transform competent cells.