Related products

Product	Amount	Cat. no.
Anza™ T4 DNA Ligase Master Mix	50 reactions	IVGN210-4
Anza™ T4 PNK Kit	50 reactions	IVGN230-4
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 *E. Coli*	20 reactions	C4040-03
One Shot™ INV110 Chemically Competent *E. Coli*	20 reactions	C7171-03

To order additional Anza™ Restriction Enzymes and Anza™ Modifying Cloning Enzymes, go to **thermofisher.com/Anza**

For support email thermofisher.com/techresources

thermofisher.com/lifescience

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ThermoFisher SCIENTIFIC

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Anza™ Alkaline Phosphatase (1 U/µL)

Cat. No.	Size	Lot no.	Exp. Date
IVGN220-4	500 reactions		
IVGN220-8	2000 reactions		

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Product description The Invitrogen™ Anza™ Alkaline Phosphatase is used for dephosphorylating vectors prior to insert ligation and for removing 5′ phosphates prior to end-labeling.

Components	IVGN210-4	IVGN210-8
Anza™ T4 Alkaline Phosphatase	500 µL	4 × 500 µL
Anza™ 10X Buffer	500 µL	2 × 1000 µL
Anza™ 10X Red Buffer	500 µL	2 × 1000 µL

Storage Store at –20°C.

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

General guidelines

- Plasmid DNA should be free of RNA and genomic DNA for efficient dephosphorylation.
- The enzyme can be heat inactivated at 80°C in 5 minutes, eliminating the need for purification prior to ligation.
- If the Anza™ restriction enzyme is incompatible with the one step protocol, use a two step protocol by performing restriction digestion prior to dephosphorylation.

  For detailed instructions on two step protocols, go to **thermofisher.com/Anza**

One step digestion and dephosphorylation protocol

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
plasmid DNA	0.2–1 µg
Anza™ 10X Buffer **or** Anza 10X Red Buffer	2 µL
Anza™ Restriction Enzyme	1 µL
Anza™ Alkaline Phosphatase	1 µL
Final reaction volume	**20 µL**

2. Mix reagents by pipetting up and down.
3. Incubate at 37°C for 15 minutes.
4. Heat inactivate enzyme by incubating at 80°C for 20 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.