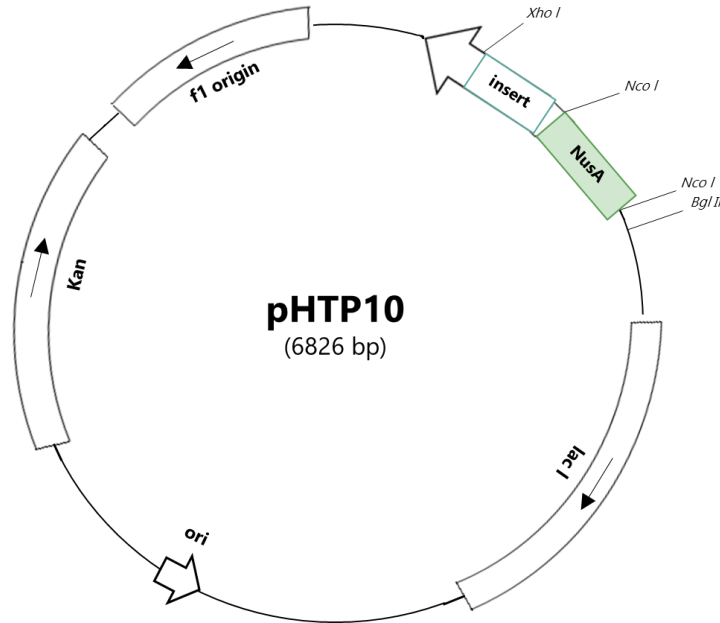


pHTP10 Vector

pHTP10 was designed for the cloning and expression of high-levels of recombinant proteins in *Escherichia coli*. Recombinant proteins are expressed in fusion with the N-utilization substance (NusA) protein, which is commonly used to promote solubility and folding of its fusion partners. This vector, included in the portfolio of NZYtech pHTP expression vectors, is part of the NZYEasy Cloning & Expression System. pHTP10 contains two poly-histidine (6xHis) sequences (N- and C-terminal) which allow subsequent recombinant protein purification by immobilized metal ion affinity chromatography (IMAC).

1. Vector Map



pHTP10 Cloning/Expression Region

<i>Nco I</i>	NusA	<i>Nco I</i>	His-Tag
<u>CCATGGG</u> TAAAGAAATTTTGGCTGTAGTTGAA .1485bp . TGGTTCGGTGACGAAGCGACTAGTG	<u>CCATGGG</u> CGCAGCCATCATCATCATCACAGCAGCGGC	<u>CCATGGG</u>	HisHisHisHisHisHisSerSerGly
MetGlyLysGluIleLeuAlaValValGlu . .495aa. TrpPheGlyAspGluAlaThrSerAlaMetGlySerSer			
CCTCAGCAAGGGCTGAGG / ⚡ / CCTCAGCTTCCGCTGAGGTCCGTCGACAAGCTTGCGGCCGCA	<u>CTCGAGC</u> ACCACCACCACCACCAC	<i>Xho I</i>	His-Tag STOP
ProGlnGlnGlyLeuArg / ⚡ / ProGlnLeuProLeuArgSerValAspLysLeuAlaAlaAlaLeuGlu	HisHisHisHisHisHis*		

⚡ Represents the site where the gene will be inserted.

Note: For correct expression, inserted gene needs to be in frame with pHTP10 5' gene sequence. Inserts correctly cloned into pHTP10 will maintain reading frames starting on the ATG codon.

Sequence added to the final recombinant protein (57.17 kDa):

MGKEILAVVEAVSNEKALPREKIFEALESALATATKKKYEQEIDVRVQIDRKSGDFDTRRRLVVDEVTPQTKEITLEAARYEDESINLGDYVEDQIESVTFD
RITTQTAKQVIVQKVREAERAMVVDQFREHEGEIITGVVKKVNRDNISLDLGNNAEAVILREDMLPRENFRPGDRVRGVLYSVRPEARQAQLFVTRSKPEMLI
ELFRIEVPEIGEEVIEIKAAARDPGSRAKIAVKTNDRIDPVGACVGMRGARVQAVSTELGGERIDIVLWDDNPAQFVINAMAPADVASIVVDEDKHTMDIAV
EAGNLAQAIGRNGQNVRLASQLSGWELNVMTVDDLQAKHQAEAHAAIDTFTKYLDIDEDFATVVLVEEGFSTLEELAYVPMKELLEIEGLDEPTVEALRERAKN
ALATIAQAQEEESLGDNKPADDLLNLEGVDRDLAFKLAARGVCTLEDLAEQGIDDLADIEGLTDEKAGALIMAARNICWFGDEATSAMGSSHHHHHSSGPQQG
LR

V1901

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