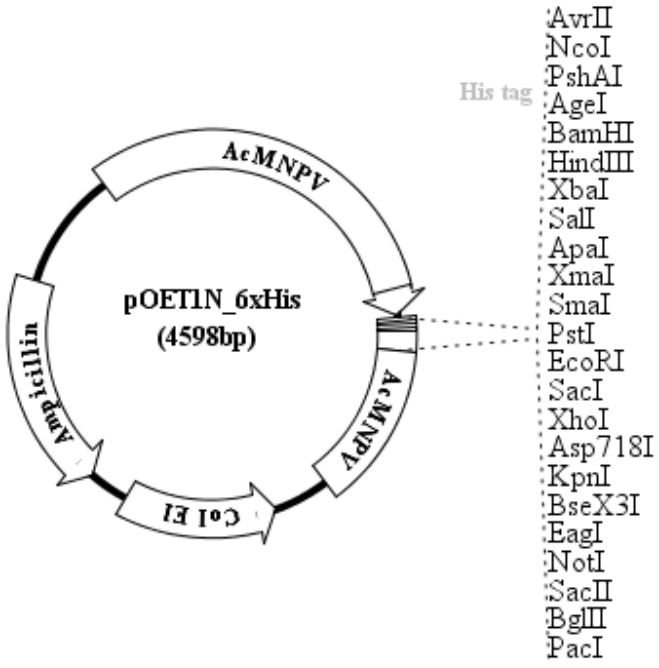
pOET1N_6xHis™ Transfer Vector

Product Information

Cat. No. : 2001011
Quantity : 10 µg
Storage : -20°C
Shipping : Room Temperature

pOET1N_6xHis is a baculovirus transfer vector designed for high level expression of foreign genes under the powerful AcMNPV polyhedron (*polh*) promoter. The vector encodes an optional N-terminal 6×His-Tag® fusion sequence that may be utilized if the insert allows read-through in the correct reading frame. This greatly eases the purification of the recombinant protein since the 6×His-containing fusion proteins bind with high affinity to Ni-NTA Agarose. If required, the 6×His-Tag® can be removed by incubating the fusion protein in the presence of the proteinase cleavage enzyme Thrombin. pOET1N_6xHis is smaller than other available transfer vectors (4598 bp) which greatly facilitate the cloning steps. It has a Col E1 origin of replication and an ampicillin resistance gene for selection in *E. coli*. The *polh* sequences have been replaced by a multiple cloning site (MCS) containing unique restriction sites for insertion of the foreign gene in the correct orientation, as shown on the circular map. The coding strand of the MCS as transcribed from the *polh* promoter is shown below the circular map. The *Pac*I site at the end of the MCS provides translational stop codons in all three reading frames for expression of truncated proteins. The AcMNPV sequences flanking the gene in the transfer vectors MCS allow recombination with the viral DNA to insert the expression cassette into the *polh* locus. pOET1N_6xHis is compatible with any baculovirus system that utilizes homologous recombination in insect cells.

AcMNPV 336-1782
Pr_PH 1770-1870
MCS 1880-2013
His tag 1895-1913
Thrombin 1919-1932
AcMNPV 2014-2630
Col E1 2836-3455
Ampicillin 3610-4470

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       Polyhedrin promoter region                AvrII     NcoI PshAI      His Tag
  ──────────────────────────►                      |         | |
AGTTTTGTAATAAAAAAACCTATAAATATAGGATCTCCTAGGACCATGGTCCATCATCACCA

         AgeI         Thrombin    BamHI HindIII XbaI     SalI       ApaI XmaI SmaI
          |     ________________|       |    |        |           ||  |
CCATCACACCGGTCTGGTTCCGCGTGGATCCAAGCTTCTAGAGTCGACGGGCCCCCGGGCTG

                                BseX3I
                                SacII
                      Asp718I   EagI
PstI EcoRI    SacI XhoI      KpnI  NotI    BglII       PacI
  | |          | |     |   |    |        |         |
CAGAATTCGAGCTCTCGAGGTACCGCGGCCGCAGATCTTAATTAA
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