TRANSFER PLASMIDS

*p**OET***™ *transfer plasmids for the flash**BAC***™ *system and other baculovirus expression vectors*

OXFORD EXPRESSION TECHNOLOGIES

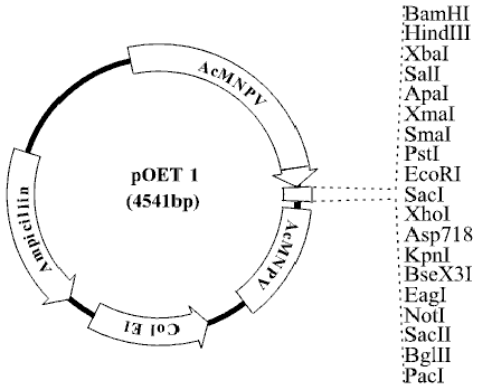
pOET1 and pOET2 for simple, easy cloning into the baculovirus system

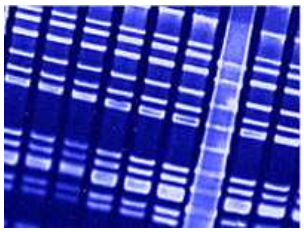
pOET1 and 2 are baculovirus transfer plasmids designed for high level expression of foreign genes under the powerful AcMNPV polyhedrin (*polh*) promoter. They have a Col E1 origin of replication and an ampicillin resistance gene for selection in *E. coli*.

The vectors are smaller than other available transfer vectors (4541 bp) which greatly facilitates the cloning steps. The *polh* coding sequences have been replaced by a multiple cloning site containing 14 unique restriction sites for insertion of the foreign gene in the correct orientation. pOET2 has the same MCS as pOET1, but in the reverse orientation.

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 MCS facilitate recombination with the virus DNA to insert the expression cassette into the *polh* locus. As well as our own *flash*BAC platform these vectors can also be used with any other baculovirus system that uses homologous recombination to insert the foreign gene into the virus genome.

- **Small size for easy cloning**
- **High level expression from the *polh* promoter**
- **Compatible with all baculovirus systems based on homologous recombination**





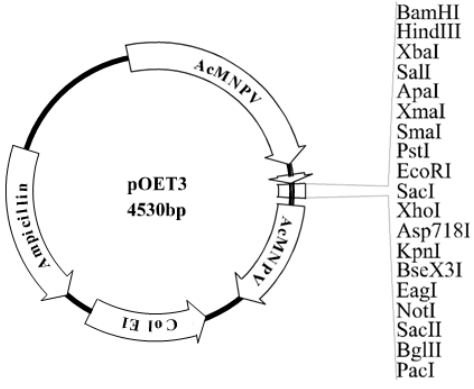
pOET3 and pOET4 for improved expression of glycosylated, secreted and membrane-targeted proteins

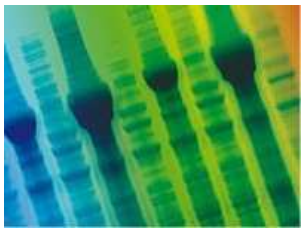
The new pOET3 and pOET4 vectors combine the flexibility and convenience afforded by pOET1 and pOET2 with additional enhanced capabilities that complement the improvements in protein expression delivered by OET's flashBAC vectors.

Protein expression is driven from the AcMNPV p6.9 promoter which provides for earlier expression than the *polh* promoter used in pOET1 and pOET2. This can deliver significant improvements when proteins that require extensive post translational modifications are produced, such as glycoproteins destined for secretion or membrane insertion.

The pOET3 and pOET4 plasmids are are also compatible with all baculovirus systems based on homologous recombination, and offer the same MCS and small size as in pOET1 to facilitate easy cloning. The pOET4 plasmid has the same MCS as pOET3, but in the reverse orientation, so offers increased options when designing a cloning strategy.

- **Enhanced expression of proteins that require extensive posttranslational modifications such as glycosylation**
- **High level expression of foreign genes under the late AcMNPV basic (p6.9) promoter.**





Oxford Expression Technologies Ltd
Oxford Brookes University
Oxford OX3 0BP UK
t: +44(0)1865 483236
f: +44(0)1865 483250
e: info@oetltd.com
W: www.oetltd.com

the science of baculovirus expression™