

# Gene synthesis – the easy way to generate your StarGate® Donor Vector

In the last years, prices for gene synthesis services became more and more favorable. Therefore gene synthesis, offered by a wide range of scientific service providers, is a fast and easy alternative to create a StarGate® Donor Vector containing your GOI (gene of interest). Compared to standard cloning procedures (via PCR, restriction enzyme digestion, purification steps, ligation), gene synthesis is a comfortable way to generate a StarGate Donor Vector offering the opportunity to optimize the codon usage of your GOI to gain improved protein expression in your particular host.

How to generate a StarGate Donor Vector by using a gene synthesis service:



- E. coli*
- Mammalian cells
- Insect cells
- Yeast



1. Enter your GOI sequence without start/stop codon
2. Select specific codon optimization for your final host
3. Add the specific combinatorial sites to the 5`- and 3`-end
4. Choose a standard cloning vector (offered by the service provider) containing an antibiotic resistance gene for **kanamycin**