Blunt-end DNA Cloning Kits

pSpark® I

For highly efficient, accurate and robust general cloning from PCR High Fidelity fragments, without the use of toxic genes

Ordering info:

Cat No.	Size
C0001-S	10 rxn
C0001	20 rxn

Includes for 20 rxn:

- 20 µL pSpark® I (20 ng/µL)
- 20 µL T4 DNA Ligase (5U/Weiss)
- 200 µL T4 DNA Ligase Buffer (5x)
- 150 µL PEG 6000 (10x)
- 5 µL Insert Control 1 kb (20 ng/µL)

Related Products:

- FastPANGEA™ Long PCR DNA Polymerase (p.106)
- CVX5α™ Chemically Competent cells (p.18)
- Custom cloning services (p.140)
- CleanEasy™ PCR Purification Kit (p.91)
- PickMutant™ Site-directed Mutagenesis Kit (p.19)
- FastPANGEA™ High Fidelity DNA Pol. (p.105)
- Ampicillin (p.126)
- ITPG (p.19)
- X-Gal (p.19)

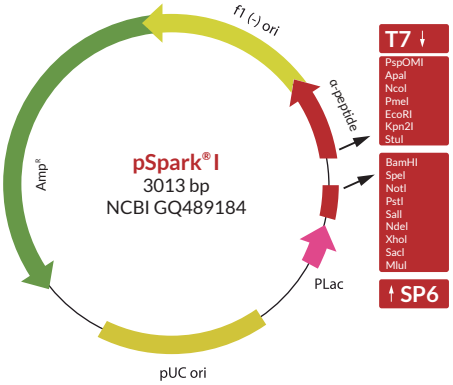
Description:

pSpark® I is a highly efficient, accurate and easy-to-use DNA cloning system based on a novel breakthrough technology to generate blunt vectors with a highly cloning efficiency.

The vector is prepared by digestion of pSpark® at EcoRV site before treating both ends to prevent vector self-ligation. The end treatment is supported by a exclusive know-how that guarantees a higher cloning efficiency than just dephosphorylated vector.

Advantages & Features:

- ✔ **Unprecedented high cloning efficiency:** > 2,500 positive colonies expected under optimal conditions.
- ✔ **Easy-to-use:** eliminate recombinant screening due to its <1% background, avoiding "suicide" strategies from toxic genes.
- ✔ **Time-saving protocol:** no hidden steps such as phosphorylation, just ligation after PCR and transformation.
- ✔ **High stability:** eliminates cloning bias or pitfalls.
- ✔ **Powerful:** clone from < 1 ng/kb, obtain 5x more positive colonies using 10x less DNA insert.
- ✔ **Compatible with blue/white screening.**
- ✔ **Great versatility:** compatible with any protocol, proofreading polymerase, competent cells, ligation time or primers.
- ✔ **Sensitive:** clone from 50 bp insert to up to 14 kb with just 5ng per kb of insert.
- ✔ **Eliminates positive selection vector.**
- ✔ **High cost-saving:** reduces your cloning costs as no expensive phosphorylated primers are needed.
- ✔ **Robust for every DNA size:** just 6.7 ng per kb of insert needed for optimal ligation.



Applications:

- ✔ General cloning.
- ✔ Cloning of High Fidelity PCR amplified products.
- ✔ Production of ssDNA.
- ✔ Blue/white screening for recombinants.
- ✔ *In vitro* transcription from T7/SP6 dual-opposed promoters.

Quality control:

- ✔ Functionally test using 1.0 kb PCR fragment.