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

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 an 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.
✓ 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.

Ordering info:

<table>
<thead>
<tr>
<th>Cat. No.</th>
<th>Size</th>
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<tbody>
<tr>
<td>C0001-S</td>
<td>10 rxn</td>
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<tr>
<td>C0001</td>
<td>20 rxn</td>
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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)
- IPTG (p.19)
- X-Gal (p.19)