

| Product Information | |
|----------------------------|--------------------------|
| repliQa™ HiFi Assembly Mix | |
| Part Number | 95190-050 |
| Number of Reactions | 50 Reactions* |
| Reaction Size | 20 µL |
| Storage Temperature | -25°C to -15°C |
| Lot Number | 023987 |
| Reference Number | 071717, 021518, D5081717 |
| Expiration Date | 02/28/2019 |

*Variable depending on individual usage of HiFi Assembly Mix

Product Description:

The repliQa HiFi Assembly Mix simplifies the construction of recombinant DNA through the simultaneous and seamless assembly of multiple DNA fragments possessing terminal regions of sequence overlap in a single, isothermal reaction. Similar in principle to the Gibson Assembly® Method, the high efficiency repliQa HiFi Assembly Mix is ideal for a range of genetic engineering applications including routine molecular cloning, site-directed mutagenesis, assembly of large constructs for synthetic biology applications, and the construction of diverse sequence libraries for directed evolution studies. The concentrated, two-component format allows flexibility in design of assembly reactions and compatibility with less concentrated DNA samples. The repliQa Mix has been optimized for use with a total input quantity of DNA fragments in the range of 0.03 to 0.5 pmols. The assembly of up to six DNA fragments is recommended, though the repliQa Mix has been successfully used for more complex assemblies.

Component Part Numbers:

84616 repliQa HiFi Assembly Enzyme Mix 0.10ml

84617 repliQa 10X Assembly Reaction Buffer 0.50ml

84619 repliQa DpnI Restriction Enzyme 0.25ml

| Product Specifications | |
|------------------------|-----------------------------------|
| 95190 | |
| Assay | DNA Assembly Quantification Assay |
| Specification | ≥15% |

Quality Control Analysis and Specifications:

The repliQa HiFi Assembly Mix is functionally tested for assembly of three 1-kb PCR fragments and quantitation of the 3 kb product.

Enzyme components were tested prior to assembly and found free of contaminating endonucleases and exonucleases. Enzyme purity was >95% as determined by SDS-PAGE and negligible *E.coli* genomic DNA contamination was confirmed by qPCR.

Limitations of Use

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This product was developed, manufactured, and sold for *in vitro* use only. The product is not suitable for administration to humans or animals. SDS sheets relevant to this product are available upon request.