

## Product Datasheet

### SCRIPT High Fidelity RT-PCR Kit (orb1733662)

#### Description

SCRIPT High Fidelity RT-PCR Kit is the ideal choice for applications where highly sensitive reverse transcription and high fidelity PCR at high amplification speed in single tubes are required. The enzyme mix is based on a genetically engineered reverse transcriptase with enhanced thermal stability providing increased specificity, high cDNA yield and improved efficiency for highly structured and long cDNA fragments. Additionally, a genetically engineered proof-reading enzyme is implemented as polymerase. It provides a 50-fold higher accuracy and an increased processivity compared to Taq, resulting in 2-fold shorter elongation times. The kit contains all reagents required for RT-PCR (except template and primer) in one box to ensure fast and easy preparation with a minimum of pipetting steps. The premium quality enzyme mix and the optimized complete reaction buffer containing ultrapure dNTPs ensure superior amplification results. RT-PCR is used to amplify double-stranded DNA from single-stranded RNA templates. In the RT step the reverse transcriptase synthesizes single-stranded DNA molecules (cDNA) complementary to the RNA template. In the first cycle of the PCR step Taq DNA polymerase synthesizes DNA molecules complementary to the cDNA, thus generating a double-stranded DNA template. During subsequent rounds of cycling the DNA polymerase exponentially amplifies this double-stranded DNA template. In one-step RT-PCR all components of RT and PCR are mixed in one tube prior to starting the reaction and thus carried out sequentially without opening the tube. This offers tremendous convenience when applied to analysis of single targets from multiple samples of RNA and minimizes the risk of contaminations.

#### Form/Appearance

liquid

#### Storage

store at -20 °C. avoid freeze/thaw cycles

#### Note

For research use only

#### Expiration Date

12 months from date of receipt.

#### Biorbyt Ltd.

7 Signet Court, Swann's Road,  
Cambridge, CB5 8LA, United Kingdom  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+44 \(0\) 1223 859-353](tel:+44(0)1223859353) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)

#### Biorbyt LLC.

68 TW Alexander Drive,  
Durham, NC, 27713, United States  
Email: [info@biorbyt.com](mailto:info@biorbyt.com), [support@biorbyt.com](mailto:support@biorbyt.com)  
Phone: [+1 \(415\) 906-5211](tel:+1(415)9065211) | Fax: [+1 \(415\) 651-8558](tel:+1(415)6518558)