

## Product Datasheet SCRIPT RT-qPCR GreenMaster highROX (orb1733657)

## Description

SCRIPT RT-qPCR SybrMaster highROX is designed for guantitative real-time analyses of RNA templates using the fluorescent DNA stain SYBR Green. The ready-to-use 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. The 2x conc. mix contains all reagents required for RT-qPCR (except template and primers) allow fast and easy preparation with a minimum of pipetting steps. The premium guality enzymes and the optimized reaction buffer ensure superior real time PCR results. RT-qPCR is used to amplify double-stranded DNA from single-stranded RNA templates to allow a rapid real-time quantification of RNA targets. In the reverse transcription step the reverse transcriptase synthesizes single-stranded DNA molecules (cDNA) complementary to the RNA template. In the first cycle of the PCR step the hot-start DNA polymerase synthesizes DNA molecules complementary to the cDNA, thus generating a double-stranded DNA template. The hot-start polymerase activity is blocked at ambient temperature and switched on automatically at the onset of the initial denaturation. The thermal activation prevents the extension of non-specifically annealed primers and primer-dimer formations at low temperatures during PCR setup. One-step RTqPCR offers tremendous convenience when applied to analysis of targets from multiple samples of RNA and minimizes the risk of contaminations.

Form/Appearance	liquid
Concentration	2x conc
Storage	store at -20 °C. avoid freeze/thaw cycles, store dark. stable at 4 °C for up to 4 weeks
Note	For research use only
Application notes	b>Spectroscopic Propertie: $\lambda$ exc 494 nm (bound to DNA), $\lambda$ em 521 nm, (bound to DNA).
Expiration Date	12 months from date of receipt.

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