

## Product Datasheet

# SCRIPT RT-qPCR GreenMaster highROX (orb572671)

<b>Catalog Number</b>	orb572671
<b>Category</b>	Tools
<b>Description</b>	<p>SCRIPT RT-qPCR SybrMaster highROX is designed for quantitative 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 quality 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 RT-qPCR offers tremendous convenience when applied to analysis of targets from multiple samples of RNA and minimizes the risk of contaminations.</p>
<b>Form/Appearance</b>	liquid
<b>Concentration</b>	2x conc
<b>Application notes</b>	<b>Spectroscopic Propertie:</b> $\lambda_{exc}$ 494 nm (bound to DNA), $\lambda_{em}$ 521 nm, (bound to DNA).
<b>Storage</b>	store at -20 °C

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**Note** For research use only

**Expiration Date** 12 months from date of receipt.

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