**Product Description:**

XLT 1-Step ToughMix v2 is a custom formulation of qScript XLT One-Step RT-qPCR ToughMix which is a ready-to-use, highly sensitive master mix for reverse transcription quantitative PCR (RT-qPCR) of RNA templates using hybridization probe detection chemistries such as TaqMan® 5' hydrolysis probes.

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**Product Specifications**

<table>
<thead>
<tr>
<th>Assay</th>
<th>1-Step RT-qPCR Functional Assay</th>
<th>DNase</th>
<th>RNase</th>
</tr>
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<tbody>
<tr>
<td>Result</td>
<td>Pass</td>
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</tbody>
</table>

**Quality Control Analysis and Specifications:**

**1-Step RT-qPCR Functional Assay:** Cq standard curve analysis must have coefficient of determination ($R^2$) ≥0.990 with a slope between −3.20 and −3.65. Control reactions lacking template RNA (NTC) must remain below fluorescence threshold through 45 PCR cycles.

**Nuclease Assay:**

- **RNase:** RNase activity must be below the detectable limits of 1 pg RNase A equivalent as assayed using a fluorogenic substrate following a 1 hour incubation at 37°C with each kit component at 1X concentration.
- **DNase:** DNase activity must be below the detectable limits of 100 pg DNase I equivalent as assayed using a fluorogenic substrate following a 1 hour incubation at 37°C with each kit component at 1X concentration.

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**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.

100 Cummings Center, Suite 407J, Beverly, MA 01915 • Ph (888) 927-7027 • Fax (978) 867-5724 • [www.QuantaBio.com](http://www.QuantaBio.com) FMWI016.2 Rev 01