**Product Description:**

The AccuStart Long Range SuperMix is a 4x, ready-to-use solution that contains all the components for long-range target amplifications, including a blend of two hot-start thermostable DNA polymerases (one with strong proof-reading activity) and an optimized buffer to ensure high efficiency, sensitivity and specificity for amplification of long-range targets. This mix enables routine and easy amplification of up to 24kb target from human genomic DNA with high accuracy (> 10-fold better fidelity than Taq) and accommodates targets with broad GC-content (no separate GC buffer needed). Fast cycling conditions (≥2 kb/min) can be implemented for extremely long targets. This product is also capable of amplifying multiple targets simultaneously—up to 6 targets up to 6 kb each.

**Component Part Numbers:**

84638 AccuStart Long Range SuperMix 0.313 mL

**Product Specifications**

<table>
<thead>
<tr>
<th>Assay</th>
<th>Long Range PCR Master Mix Functional Assay</th>
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<td>Result</td>
<td>Pass</td>
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**Quality Control Analysis and Specifications:**

The functionality of the AccuStart Long Range SuperMix is evaluated in a PCR reaction to produce a major band of amplification for targets at 24 kb, 17.5 kb and 8.5 kb from 5 ng of Human Genomic DNA.

**Notes:**

Enzyme components were tested prior to formulation of the master mix and found free of contaminating endonucleases and exonucleases. Enzyme purity was >99% as determined by SDS-PAGE and negligible E.coli genomic DNA contamination was confirmed by qPCR. Specific activity was verified for each enzyme pre-formulation.

**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 a administration to humans or animals. SDS sheets relevant to this product are available upon request.

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