

Pacific Biosciences library preparation

Samplix recommends using the SMRTbell™ Template Prep Kit 1.0 according to the standard protocol "[Procedure & Checklist - Preparing HiFi SMRTbell® Libraries using SMRTbell Template Prep Kit 1.0](#)" from Pacific Biosciences. Libraries can be produced using 2 kb or 5 kb insert sizes. The longer the insert, the more DNA is required as input to the protocol.

Pacific Biosciences sequencing

The libraries can be sequenced on the PacBio RSII using C4 chemistry, P6 polymerase, and 240 minutes movie time, or on the Sequel instrument using v2.1 chemistry and a 600 minutes movie time.

Note

When selecting a suitable PacBio library preparation take into account that it is compatible with 1-2 µg of DNA input, which is the typical range of Xdrop™ Samplicons (enrichment output).

A novel [library preparation procedure compatible with low DNA input](#) (as low as 150 ng) has been recently developed, but not yet validated with Samplicons.