

# Roche Universal Blocking Oligo Kit

The Roche Universal Blocking Oligo (UBO) Kit is designed for use in blocking dual- or single-index Illumina barcoded adapters in target enrichment experiments. The inclusion of blocking oligos in the hybridization step will prevent adapter-adapter binding and increase the on-target mapped reads compared to experiments without blocking oligos. This kit enables an easier workflow as it removes the need to match individual blocking oligos to specific adapter sequences.

## Features

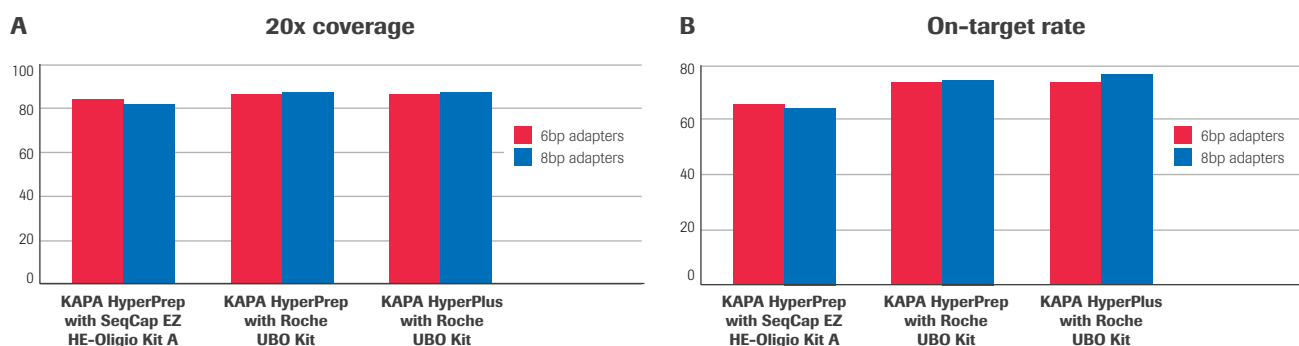
- A single tube mixture of the UBO Kit is sufficient to block all i7 and i5 adapters (including 6- or 8-mer indexes, or a combination of these)
- Can be used with single- or dual-indexed adapters
- Performance is equivalent or better than individually matched blocking oligos

## Benefits

- Simplified workflow and experiment planning due to UBO flexibility
- Simplified purchasing and reagent management enabled by single-tube blocker configuration
- Reduced expenses and time to complete enrichment

## Feel the difference with Roche UBOs

Experiments to compare the blocking performance of the Roche UBO Kit vs the SeqCap EZ HE-Oligo Kit A were performed using 6bp and 8bp single-index adapters with KAPA HyperPrep and KAPA HyperPlus library construction kits. A 2.8Mb oncology panel was used for enrichment, with each set of experiments consisting of a pool of 8 technical replicates of sample NA12891. The UBO Kit performed similarly to the SeqCap EZ HE-Oligo Kit A in terms of the percentage of target covered at 20x depth, and better in terms of on-target reads.



**A.** Percentage of target covered at 20x depth was similar for all library prep methods, adapters, and blocking oligos. **B.** Percent of reads on target was higher for all library prep methods when using the Roche UBO Kit regardless of adapter strategy or library prep method.

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Data on file.

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