

## Product Description

KAPA Dual-Indexed Adapter Kits for Illumina platforms are designed for use with KAPA DNA and RNA library preparation kits to construct libraries for sequencing on an Illumina sequencer. Each plate contains a set of 96 adapters, each with two, 8-nucleotide indexes (barcodes) for multiplexed sequencing applications.

The sequences of the sequencing indices (barcodes) included in KAPA Dual-Indexed Adapter Kits are given in **Important Parameters: Index Sequences and Pooling Guidelines** (p. 6). The highly dissimilar nature of indices minimizes the possibility of inaccurate index calling.

KAPA Adapter Dilution Buffer [10 mM Tris-HCl, (pH 8.0 – 8.5), 10 mM NaCl, 1 mM EDTA] is provided with the kit to ensure optimal performance when adapters require further dilution.

## Product Applications

KAPA Dual-Indexed Adapters are used to uniquely label sequencing libraries generated from individual biological samples. This allows for the pooling of libraries prior to target capture or cluster generation, to enable multiplexed sequencing—which simplifies sample preparation and reduces the cost of next-generation sequencing for a wide range of applications.

Primary applications for the use of KAPA Dual-Indexed Adapter Kits for Illumina platforms include:

- Human whole genome sequencing, performed with an Illumina HiSeq X instrument
- whole exome or targeted sequencing, using Roche NimbleGen SeqCap EZ or IDT xGen Lockdown Probes or other hybridization capture systems, in combination with the appropriate blockers
- RNA-seq
- ChIP-seq
- other direct sequencing applications, e.g., microbial whole-genome sequencing on compatible platforms.

**NOTE:** KAPA Dual-Indexed Adapters are not methylated, and can therefore not be used for methyl-seq applications.

## Product Specifications

### Shipping and Storage

KAPA Dual-Indexed Adapter Kits are shipped on dry ice or ice packs, depending on the destination country. Upon receipt, immediately store the product at -15°C to -25°C in a constant-temperature freezer. Adapters must not be exposed to temperatures above room temperature. When stored under these conditions and handled correctly, the adapters will retain full functionality until the expiry date indicated on the kit label. The KAPA Adapter Dilution Buffer may be stored at 2°C to 8°C for short-term use, but -15°C to -25°C is recommended for long-term storage.

### Procedure for handling Dual-Indexed Adapter Plate

- Remove the KAPA Dual-Indexed Adapter plate from its packaging sleeve and thaw at room temperature for 10 min.
- Centrifuge the KAPA Dual-Indexed Adapter plate at 280 x g for 1 min at room temperature.
- Carefully remove the foil cover to avoid cross-contamination of the dual-indexed adapters. Discard the foil cover.
- Remove the desired volume of each dual-indexed adapter by following the guidelines in **Important Parameters** (pp. 3 – 7).
- If you are not processing the entire KAPA Dual-Indexed Adapter plate at the same time, apply a new adhesive foil seal (3 are supplied in the KAPA Dual-Indexed Adapter Kit).
  - If required, similar sealing film can be used for plates containing diluted adapters.
- Label the re-sealed Dual-Indexed Adapter plate and store at -15°C to -25°C in a constant-temperature freezer.

### Quality Control

KAPA Dual-Indexed Adapters are subject to stringent functional and barcode cross-contamination quality control. KAPA Adapter Dilution Buffer is free of detectable contaminating exo- and endonuclease activities, and meets strict requirements with respect to DNA contamination.

KAPA dviejų indeksų adapterių rinkiniai, skirti *Illumina* platformoms, pritaikyti naudoti su KAPA DNR ir RNR bibliotekų paruošimo rinkiniais ruošiant bibliotekas sekoskaitai su *Illumina* sekoskaitos prietaisu. Vienoje plokštelėje yra 96 adapterių rinkinys; kiekvienas adapteris turi du 8 nukleotidų indeksus (brūkšninius kodus); jis skirtas naudoti dauginėms sekoskaitoms.

KAPA dviejų indeksų adapterių rinkiniuose esančių sekoskaitos indeksų (brūkšninių kodų) sekos nurodytos svarbiuose parametruose: indekso sekos ir kaupinių ruošimo rekomendacijos (6 psl.). Labai skirtingas indeksų pobūdis iki minimumo sumažina netikslaus indekso panaudojimo tikimybę.

Su rinkiniu tiekiamas KAPA adapterio skiedimo buferis [10 mM Tris-HCl, (pH 8,0–8,5), 10 mM NaCl, 1 mM EDTA], kad būtų užtikrinamos optimaliausios eksploatacinės savybės, kai adapterius reikia skiesti.

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Vertėja |

(parašas)



Susiūta ir sumatneruota 2 lapų (lapai)