

**Oligos for pre- and post-capture library amplification using LM-PCR**

TS-PCR Oligo 1:

AATGATACGGCGACCACCGAGA (100 µM)

TS-PCR Oligo 2:

CAAGCAGAAGACGGCATAACGAG (100 µM)

**Oligos for the generation of DNA Illumina multiplex (IM) libraries**

\* = Phosphothioate bound

Note: The indexed segment of the primer is underlined.

IS1\_adapter.P5:

A\*C\*A\*C\*TCTTTCCCTACACGACGCTCTTCCG\*A\*T\*C\*T (500 µM)

IS2\_adapter.P7:

G\*T\*G\*A\*CTGGAGTTCAGACGTGTGCTCTTCCG\*A\*T\*C\*T (500 µM)

IS3\_adapter.P5+P7:

A\*G\*A\*T\*CGGAA\*G\*A\*G\*C (500 µM)

IS4:

AATGATACGGCGACCACCGAGATCTACACTCTTTCCCTACACGACGCTCTT (10 µM)

Index primer 7001:

CAAGCAGAAGACGGCATAACGAGATCCTGCGAGTGACTGGAGTTCAGACGTGT (10 µM)

Index primer 7002:

CAAGCAGAAGACGGCATAACGAGATTGCAGAGTGACTGGAGTTCAGACGTGT (10 µM)

Index primer 7003:

CAAGCAGAAGACGGCATAACGAGATACCTAGGGTGACTGGAGTTCAGACGTGT (10 µM)

Index primer 7004:

CAAGCAGAAGACGGCATAACGAGATTTGATCCGTGACTGGAGTTCAGACGTGT (10 µM)

Index primer 7005:

CAAGCAGAAGACGGCATAACGAGATATCTTGCGTGACTGGAGTTCAGACGTGT (10 µM)

Index primer 7006:

CAAGCAGAAGACGGCATAACGAGATTCTCCATGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7007:

CAAGCAGAAGACGGCATAACGAGATCATCGAGGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7008:

CAAGCAGAAGACGGCATAACGAGATTTTCGAGCGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7009:

CAAGCAGAAGACGGCATAACGAGATAGTTGGTGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7010:

CAAGCAGAAGACGGCATAACGAGATGTACCGGGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7011:

CAAGCAGAAGACGGCATAACGAGATCGGAGTTGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7012:

CAAGCAGAAGACGGCATAACGAGATACTTCAAGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7013:

CAAGCAGAAGACGGCATAACGAGATTGATAGTGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7014:

CAAGCAGAAGACGGCATAACGAGATGATCCAAGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7015:

CAAGCAGAAGACGGCATAACGAGATCAGGTCCGGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7016:

CAAGCAGAAGACGGCATAACGAGATCGCATTAGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7017:

CAAGCAGAAGACGGCATAACGAGATGGTACCTGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7018:

CAAGCAGAAGACGGCATAACGAGATGGACGCAGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7019:  
CAAGCAGAAGACGGCATAACGAGATGAGATTCGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7020:  
CAAGCAGAAGACGGCATAACGAGATGAGCATGGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7021:  
CAAGCAGAAGACGGCATAACGAGATGTTGCGTGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7022:  
CAAGCAGAAGACGGCATAACGAGATCCAATGCGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7023:  
CAAGCAGAAGACGGCATAACGAGATCGAGATCGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7024:  
CAAGCAGAAGACGGCATAACGAGATCATATTGGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7025:  
CAAGCAGAAGACGGCATAACGAGATGACGTCAGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7026:  
CAAGCAGAAGACGGCATAACGAGATTGGCATCGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7027:  
CAAGCAGAAGACGGCATAACGAGATGTAATTGGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7028:  
CAAGCAGAAGACGGCATAACGAGATCCTATCTGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7029:  
CAAGCAGAAGACGGCATAACGAGATCAATCGGGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7030:  
CAAGCAGAAGACGGCATAACGAGATGCGGCATGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7031:  
CAAGCAGAAGACGGCATAACGAGATAGTACTGGTGACTGGAGTTCAGACGTGT (10 μM)

Index primer 7032:

CAAGCAGAAGACGGCATAACGAGATTACTATTGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

Index primer 7033:

CAAGCAGAAGACGGCATAACGAGATCCGGATGTGACTGGAGTTCAGACGTGT (10  $\mu$ M)

**Blocking oligos for saturating library adapters during the sequence capture hybridization**

All blocking oligos for TruSeq- and IM libraries were dissolved in PCR-grade water (1 mM).

The designation `/term/` indicates the addition of a 3' terminator modification (dideoxy-C or inverted-dT) to exclude oligo remnants from extension during PCR reactions.

Note: The indexed segment of the oligo is underlined.

TruSeq HE Universal Oligo 1 (for all TruSeq DNA, TruSeq DNA PCR-free and DNA Illumina multiplex (IM) libraries):

AATGATACGGCGACCACCGAGATCTACACTCTTTCCCTACACGACGCTCTTCCGATCT

**a) Blocking oligos for Illumina TruSeq DNA and TruSeq DNA PCR-free DNA sample preparation kits**

TruSeq INV-HE Index Oligo 2 (for adapter AD002):

CAAGCAGAAGACGGCATAACGAGATACATCGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT /term/

TruSeq INV-HE Index Oligo 4 (for adapter AD004):

CAAGCAGAAGACGGCATAACGAGATTGGTCAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT /term/

TruSeq INV-HE Index Oligo 5 (for adapter AD005):

CAAGCAGAAGACGGCATAACGAGATCACTGTGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT /term/

TruSeq INV-HE Index Oligo 6 (for adapter AD006):

CAAGCAGAAGACGGCATAACGAGATATTGGCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT /term/

TruSeq INV-HE Index Oligo 7 (for adapter AD007):

CAAGCAGAAGACGGCATAACGAGATGATCTGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT /term/

TruSeq INV-HE Index Oligo 12 (for adapter AD012):

CAAGCAGAAGACGGCATAACGAGATTACAAGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

*b) Blocking oligos for DNA Illumina multiplex (IM) libraries*

IM INV-HE Index7001 Oligo (for index 7001):

CAAGCAGAAGACGGCATAACGAGATCCTGCGAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7002 Oligo (for index 7002):

CAAGCAGAAGACGGCATAACGAGATTGCAGAGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7003 Oligo (for index 7003):

CAAGCAGAAGACGGCATAACGAGATACCTAGGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7004 Oligo (for index 7004):

CAAGCAGAAGACGGCATAACGAGATTTGATCCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7005 Oligo (for index 7005):

CAAGCAGAAGACGGCATAACGAGATATCTTGCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7006 Oligo (for index 7006):

CAAGCAGAAGACGGCATAACGAGATTCTCCATGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7007 Oligo (for index 7007):

CAAGCAGAAGACGGCATAACGAGATCATCGAGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7008 Oligo (for index 7008):

CAAGCAGAAGACGGCATAACGAGATTTTCGAGCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7009 Oligo (for index 7009):

CAAGCAGAAGACGGCATAACGAGATAGTTGGTTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7010 Oligo (for index 7010):

CAAGCAGAAGACGGCATAACGAGATGTACCGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7011 Oligo (for index 7011):

CAAGCAGAAGACGGCATAACGAGATCGGAGTTTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7012 Oligo (for index 7012):

CAAGCAGAAGACGGCATAACGAGATACTTCAAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7013 Oligo (for index 7013):

CAAGCAGAAGACGGCATAACGAGATTTGATAGTTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7014 Oligo (for index 7014):  
CAAGCAGAAGACGGCATAACGAGATGATCCAAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7015 Oligo (for index 7015):  
CAAGCAGAAGACGGCATAACGAGATCAGGTCCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7016 Oligo (for index 7016):  
CAAGCAGAAGACGGCATAACGAGATCGCATTAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7017 Oligo (for index 7017):  
CAAGCAGAAGACGGCATAACGAGATGGTACCTGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7018 Oligo (for index 7018):  
CAAGCAGAAGACGGCATAACGAGATGGACGCAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7019 Oligo (for index 7019):  
CAAGCAGAAGACGGCATAACGAGATGAGATTCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT /term/

IM INV-HE Index7020 Oligo (for index 7020):  
CAAGCAGAAGACGGCATAACGAGATGAGCATGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7021 Oligo (for index 7021):  
CAAGCAGAAGACGGCATAACGAGATGTTGCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7022 Oligo (for index 7022):  
CAAGCAGAAGACGGCATAACGAGATCCAATGCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7023 Oligo (for index 7023):  
CAAGCAGAAGACGGCATAACGAGATCGAGATCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7024 Oligo (for index 7024):  
CAAGCAGAAGACGGCATAACGAGATCATATTGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV\_HE Index7025 Oligo (for index 7025):  
CAAGCAGAAGACGGCATAACGAGATGACGTCAGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7026 Oligo (for index 7026):  
CAAGCAGAAGACGGCATAACGAGATTGGCATCGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7027 Oligo (for index 7027):

CAAGCAGAAGACGGCATAACGAGATGTAATTGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7028 Oligo (for index 7028):

CAAGCAGAAGACGGCATAACGAGATCCTATCTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7029 Oligo (for index 7029):

CAAGCAGAAGACGGCATAACGAGATCAATCGGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7030 Oligo (for index 7030):

CAAGCAGAAGACGGCATAACGAGATGCGGCATGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7031 Oligo (for index 7031):

CAAGCAGAAGACGGCATAACGAGATAGTACTGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7032 Oligo (for index 7032):

CAAGCAGAAGACGGCATAACGAGATTACTATTGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/

IM INV-HE Index7033 Oligo (for index 7033):

CAAGCAGAAGACGGCATAACGAGATCCGGATGGTGACTGGAGTTCAGACGTGTGCTCTTCCGATCT/term/