



TruGrade™ DNA Oligos

Reduce barcode crosstalk in your multiplexed NGS experiments



DNA oligos with cross contamination levels as low as 0.01%



More consistent sequencing data



Experience the quality and quick turn around time for which IDT is known for



Oligos manufactured to your exact specifications with custom formulation and mixing options

Quality requirements for oligonucleotides used in next generation sequencing (NGS), such as indexed adapters and barcoded fusion primers, have reached unprecedented high levels. PAGE, HPLC, and other traditional purification methods, can effectively increase the amount of full-length oligo, but are incapable of reducing cross contamination that can occur in co-synthesized oligos.

For most experiments, such oligo-to-oligo crosstalk does not influence experiment outcome. However, the use of indexed adapters containing even low levels of cross contamination can lead to barcode misalignment and sample misidentification, which may confound identification of rare variants.

TruGrade oligos are manufactured using proprietary methods that are shown to reduce index crosstalk and increase success of multiplexed NGS experiments.

TruGrade DNA oligos can be used in a variety of applications including, but not limited to:

- NGS library preparation to incorporate barcoded adapters for multiplexed sequencing
- PCR using barcoded fusion primers for multiplex amplicon sequencing
- Other molecular biology applications that may affect oligo cross talk

The TruGrade synthesis and processing service is available for HPLC-purified DNA oligos and Ultramer™ DNA oligos. These oligos can be shipped in either plates or tubes, and are available single-stranded or duplexed.

Product specifications

Parameter	HPLC-purified DNA oligos	Ultramer DNA Oligos
Typical cross contamination ¹	0.10–0.50%	0.01–0.05%
Synthesis scale	100 nmol, 250 nmol, or 1 µmol	N/A
Yield delivered	Variable	4 nmol or 20 nmol

¹ Typical cross contamination levels were determined using in-house proprietary QC techniques and on market product data.

For more information, visit idtdna.com/TruGrade

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