

ZARA OPC Cartridges/Plates

ZARA OPC products are polymer based reversed-phase products with a pore size of about 300 Å. Compared to C8 or C18 products, they are stable to organic and basic samples.

These products can be used to purify oligo in general or to purify DMT-on oligo.

These products not only eliminates salts and trace organic impurities from the crude oligonucleotide, but also provides pure oligonucleotides for sequencing primers, PCR primers, hybridization probes, and gene constructions.

- ✿ Organic samples
- ✿ Wide range of oligo with different molecular weight, from 15 mers to 80 mers
- ✿ High purity product
- ✿ Able to separate DMT-on oligo from other impurities



General protocol of purification oligo from other impurities

The flow rate of solvents through the cartridge should be regulated at rate of 1-2 drops/sec.

- ✿ Oligo sample preparation: use amino incubation solution of synthesized CPGs
- ✿ Condition the OPC product with 2 x 0.5 mL of methanol, followed by 0.5 mL of acetonitrile, then 2 x 0.5 mL 2.0 M TEAA.
- ✿ Load the deprotection mixture (0.1 - 0.3 mL, NH₄OH or AMA mixture).
- ✿ Wash the OPC with 2 x 1 mL of ammonium hydroxide:water (1:20).
- ✿ Wash the OPC with 1 mL of DI water
- ✿ Wash the OPC with 0.4 mL of 2% (v/v) acetonitrile in water
- ✿ Elute oligonucleotide from OPC with 0.2 mL of 30% ACN/water. Collect the eluted fraction.

General protocol of purification DMT-on oligo

The flow rate of solvents through the cartridge should be regulated at rate of 1-2 drops/sec.

- ✿ Oligo sample preparation: use amino incubation solution of synthesized CPGs
- ✿ Condition the OPC cartridge with 2 x 0.5 mL of methanol, followed by 0.5 mL of acetonitrile, then 2 x 0.5 mL 2.0 M TEAA.
- ✿ Load the ammonium incubation mixture (0.1 mL, NH₄OH or AMA mixture).
- ✿ Wash the OPC with 2 x 1 mL of ammonium hydroxide:water (1:20).
- ✿ Wash the OPC with 1 mL of DI water
- ✿ Detritylate support bound oligonucleotide with 2x 0.5 mL of 2% TFA: a faint pink/orange band may be observed in the cartridge (good evidence of the presence of the oligonucleotide!)
- ✿ Wash the OPC with 2x0.5 mL of water.
- ✿ Elute oligonucleotide from OPC with 0.2 mL of 30% ACN/water. Collect the eluted fraction.