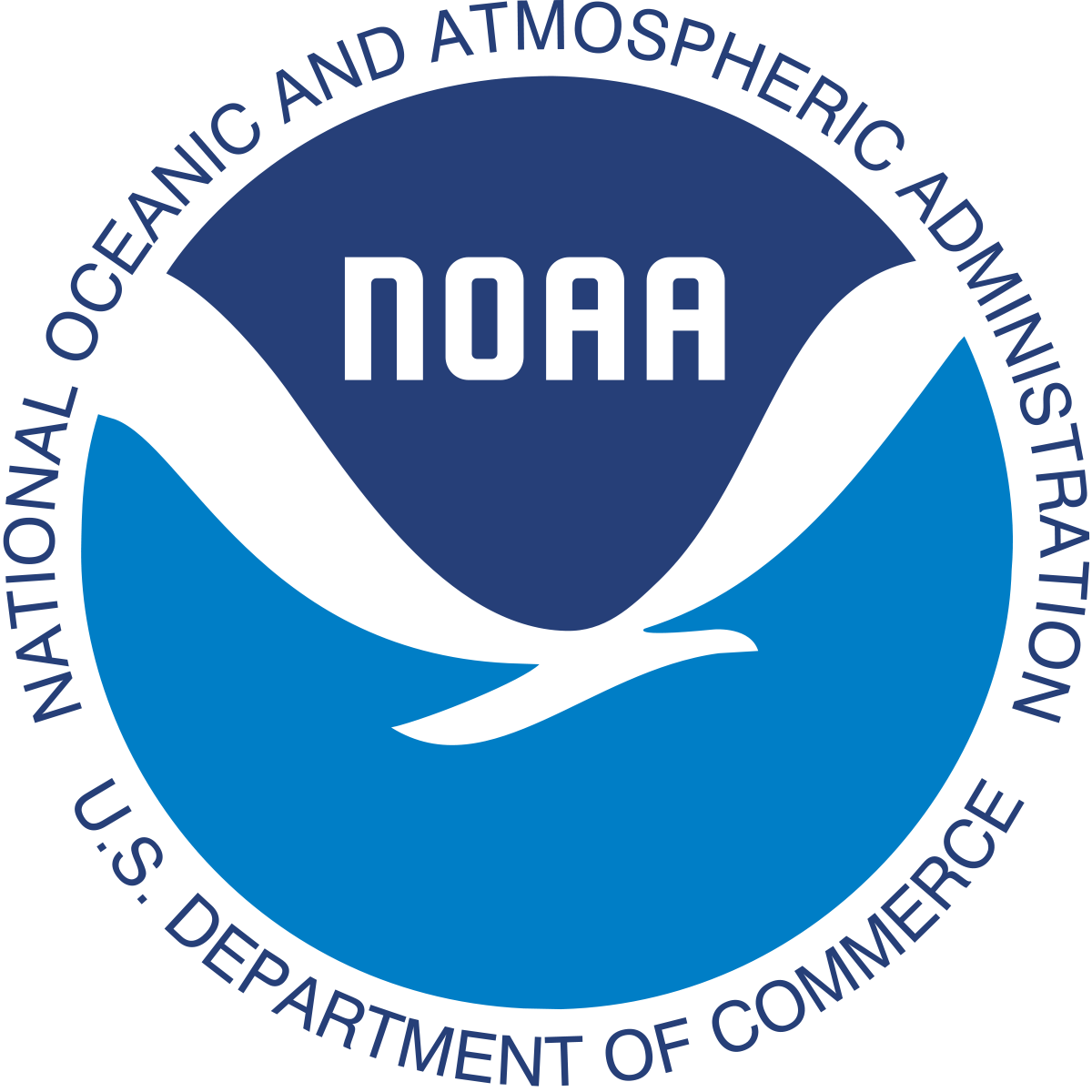
# Zymo Clean and Concentrator-5 NOAA Protocol



## Specifications

* High-quality purified DNA is eluted in water
* DNA size – 75bp to 23kb
* DNA recovery – Up to 5µg total DNA can be eluted in 6-10µl water.
* For 75bp to 10kb DNA recovery is 70-95%.
* For 11kb to 23kb recovery is 50-70%
* Product Detergent Solution – <5% TritonX-100, <5% Tween-20, <5% Sarkosyl, <0.1% SDS

## Protocol

1. In a 1.5ml microcentrifuge tube, add **2 volumes DNA Binding Buffer** to each volume of DNA Sample.
   * E.g., 300µl binding buffer to 150µl DNA sample
   * Add 100µl binding buffer to all samples <50µl
   * For ssDNA, add 7 volumes to each volume of sample (350µl binding buffer to 50µl sample).
2. Mix briefly by vortexing
3. Transfer mixture to **Zymo-spin column in a collection tube**
   * Column capacity is 800µl, therefore if greater need to load and spin column multiple times.
4. Centrifuge at >12,000g for 30 seconds
5. Empty flow through
6. Add **200µl Wash Buffer** to column
7. Centrifuge at >12,000g for 30 seconds
8. Empty flow through
9. Add **200µl Wash Buffer** to column
10. Centrifuge at >12,000g for 30 seconds
11. Discard collection tube and transfer to a clean 1.5ml microcentrifuge tube.
12. Add **6-10µl (or more) water** directly to the column matrix
13. Centrifuge at >12,000g for 15-30 seconds to elute DNA.
    * If using water, make sure pH is >5.
    * Waiting 1 minute after adding water to column may improve yield of larger (>6kb) DNA.
    * For DNA >10kb, total yield may be improved by using water @ 60-70oC.
    * Can also use TE buffer (10mM Tris-HCL, 1mM EDTA, pH 8) for elution
    * Can also use modified TE (10mM Tris, 0.1mM EDTA, pH 8.5) for elution.