High Efficiency CdSe/ZnS Quantum Dots Conjugated to Streptavidin.

Lot # 202502012
Product # AU2043
Retest Date: Feb 2026

Quantum Dot Specifications

Emission Peak:	**655 +/- 10nm**
Concentration:	**0.08uM**
Particle size:	**9-11nm**
Absorption Peak:	**440-650nm**
Quantum Yield:	**>50%**
Storage:	**2-8°C Away from light**
Solvent:	**50mM Borate buffer pH 8.3, 0.05% sodium azide**
Volume:	**250ul**
Preservative:	**Sodium Azide**

Running Buffer Specifications

Type:	**RNase Free Running Buffer #1 (Part of AU2035)**
Volume:	**50mL**
Preservative:	**Sodium Azide 0.1%**
pH:	**7.6**
Lot Number:	**202501029**
Storage:	**Room Temperature**

Usage Guide

For the best results with oligonucleotides:

1. Add 100-150uL of one of our various proprietary running buffers.
2. Add 0.5uL - 1uL of our Streptavidin Conjugated Q-dots. If you choose to dilute the beads, the solvent above will work best in this context.
3. Add 0.5 - 10pmol of Biotin labeled oligonucleotide
4. Run times can range anywhere from 15 minutes to 45 minutes.

NOTE: To spray or spotting onto conjugate pads, please inquire for recommendations (sales@attogene.com).

Suggested Storage and Handling Procedures

Store at 2-8 °C away from light. Storage at low temperature increases shelf life and stability of the nanoparticles, preventing changes in shape and/or size.

DO NOT FREEZE. Freezing will induce irreversible aggregation of particles and destroy the product.

Bring to room temperature and shake well before each use. Particles may settle to the bottom over time. Shake vigorously for 30 seconds to ensure particles are fully dispersed before use. Visually inspect to ensure all product has redispersed. If particulates or plating remain, sonicate for 1 minute, shake, and repeat as necessary. To minimize heating, do not sonicate for periods longer than 1 minute.

Dilution. We suggest diluting the particles with 50 mM Boric Acid pH 8.3 for optimal stability.