

## New England Biolabs Product Specification

*Product Name:* Supercoiled DNA Ladder  
*Catalog #:* N0472S  
*Concentration:* 500 µg/ml  
*Unit Definition:* N/A  
*Shelf Life:* 24 months  
*Storage Temp:* -20°C  
*Storage Conditions:* 10 mM Tris-HCl (pH 8.0), 1 mM EDTA  
*Specification Version:* PS-N0472S v1.0  
*Effective Date:* 14 May 2014

### Assay Name/Specification (minimum release criteria)

**A260/A280 Assay** - The ratio of UV absorption of Supercoiled DNA Ladder at 260 and 280 nm is between 1.8 and 2.0.

**DNA Concentration (A260)** - The concentration of Supercoiled DNA Ladder is between 500 and 550 µg/ml as determined by UV absorption at 260 nm.

**Electrophoretic Pattern (Marker)** - The banding pattern of Supercoiled DNA Ladder on a 0.8% agarose gel shows discrete, clearly identifiable bands at each band of the marker, when stained with Ethidium Bromide at a concentration of 0.5 µg/ml.

**Non-Specific DNase Activity (DNA, 16 hour)** - A 50 µl reaction in 1X NEBuffer 2 containing 2.5 µg of Supercoiled DNA Ladder incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.



Derek Robinson  
Director of Quality Control

Date 14 May 2014

