ACCURIS High Sensitivity dsDNA Quantification Kit Instructions

Contents

ACCURIS High Sensitivity dsDNA Quantification Kit

Specifications

- **Kit Name:** AccurisTM High Sensitivity dsDNA Quantification Kit
- **Assays:** 100
- **Storage:** Store components as instructed in the manual
- **Components:** See detailed list below

Product Information

The Accuris High Sensitivity dsDNA Quantification Kit is designed for accurate and sensitive quantification of double-stranded DNA. The kit includes all necessary components for preparing samples, measuring fluorescence, and generating standard curves for precise quantification.

Kit Components & Storage Requirements

- 2x qMAccuris High Sensitivity dsDNA Reagent
- Accuris High Sensitivity dsDNA Standard #1 (Component 3)
- Accuris High Sensitivity dsDNA Standard #2 (Component 4)

Description

The Accuris dsDNA HS Quantitation Kit provides a simple, sensitive and accurate quantitation for dsDNA. The kit includes concentrated assay reagent, dilution buffer, and prediluted dsDNA standards. The assay kit is highly sensitive and selective for dsDNA due to fluorescence dye high quantum yield and large molar extinction coefficient. The kit is highly reliable in detecting dsDNA with initial sample concentrations from 0.005 ng/µL to 120 ng/µL ranging from 0.1 to 120 ng. The kit offers advantages in stability, linear dynamic range, and sensitivity over other traditional of DNA quantitation. The reagent is simply diluted using the buffer provided, added your sample (any volume between 1 µL and 20 µL is acceptable), and then read the concentration using a fluorometer.

Package Contents

The kit includes the Accuris High Sensitivity dsDNA Quantification Kit with 100 assays. Catalog number: NS1020-HS100.

Technical Support

For troubleshooting and technical support, contact Accuris at **info@accuris-usa.com** or call 908 769-5555.

Usage Instructions

General Protocol Preparation

1. Ensure the kit is at room temperature and check for any precipitation in the reagent.
2. If precipitation is observed, warm the vial in a water bath and vortex until dissolved.
3. Warm up the dsDNA HS Quantitation Kit to room temperature. Check the dsDNA HS reagent for any precipitation. If precipitation is seen, warm up the vial in a water bath and vortex until dissolved.
4. Prepare the working solution by diluting the dsDNA HS reagent 1:200 in 1× dsDNA HS buffer. Use a clean plastic tube each time to make working solution. For example, to measure 8 samples in duplicate, add 10 µL of dsDNA HS reagent to 1990 µL of dsDNA HS Buffer. Mix well and use IMMEDIATELY. Once mixed into the working solution, samples must be measured within 3 hours to prevent degradation of fluorescence intensity.

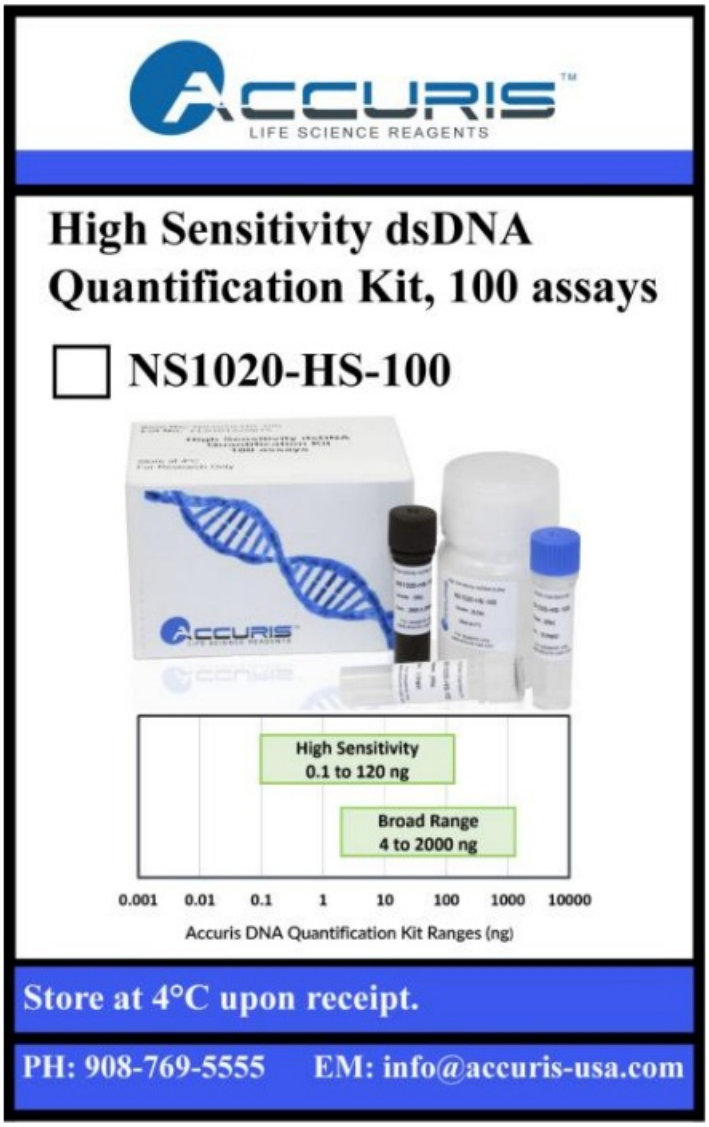
Standard Curve Setup

1. Add working solution to each assay tube.
2. Add dsDNA standards into separate tubes, mix well, and incubate for 3 minutes.
3. Measure fluorescence using the calibration program for standard curve generation.
4. Add 190 µL of the working solution to each assay tube. (Note: Use only thinwall, clear 0.5 mL PCR tubes for fluorescence analysis.
5. Add 10 µL of dsDNA standard #1 (Component 3), dsDNA standard #2 (Component 4) into separated tubes, and mix by vortexing (5-10 seconds), and incubate all tubes at room temperature for 3 minutes in the dark. Note: When mixing dsDNA standard and working solution, please disperse the bubbles before analysis.
6. Measure the fluorescence using the calibration program of standard curve. Click dsDNA in the Home interface, select “dsDNA: High Sensitivity” and press the button. Select “Calibration” from the pop-up box. Standard 1 should be set by default as having 0 concentration. Insert standard 1 into the fluorometer port and click “Read standards” to perform the measurement. Once finished, proceed to set up and measure standard 2. After calibration, samples are ready to be measured.

Measuring Samples

1. Add the sample to the working solution in an assay tube.
2. Mix well and incubate for 3 minutes.
3. Place samples into the fluorometer for measurement immediately.
4. Add the sample (any volume between 1 µL and 20 µL is acceptable) and the working solution, and the final volume in each tube should be 200 µL.
5. Mix by vortexing (5-10 seconds). Incubate all tubes at room temperature for 3 minutes in the dark. Note: When mixing dsDNA standard and working solution, please disperse the bubbles before analysis.

Package contents and reordering
Accuris High Sensitivity dsDNA Quantification Kit, 100 assays – Catalog number NS1020-HS100 Accuris offers a full line of PCR enzymes and master mixes. Visit **www.accuris-usa.com** for details.



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FAQ

Q: How long can samples mixed with working solution be stored before measurement?
A: Samples must be measured within 3 hours of mixing with the working solution to prevent degradation of fluorescence intensity.

Q: What should I do if I observe precipitation in the reagent?
A: Warm up the vial in a water bath and vortex until the precipitation is dissolved before use.

Documents / Resources

	ACCURIS High Sensitivity dsDNA Quantification Kit [pdf] Instructions High Sensitivity dsDNA Quantification Kit, High Sensitivity dsDNA Quantification Kit, Sensitivity dsDNA Quantification Kit, dsDNA Quantification Kit, Quantification Kit, Kit

References

- USA Location information - USA.com

- Home - Accuris Instruments
- Home - Accuris Instruments
- User Manual