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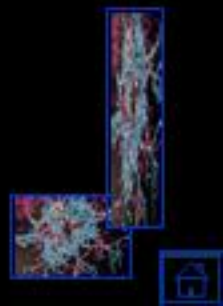
Single-Stranded DNA (ssDNA) Apoptosis ELISA Kit (APT225)



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ssDNA Apoptosis ELISA

Detects apoptosis with high sensitivity and specificity

Kit Components:

- Antibody Mixture: ssDNA Monoclonal & HRP-secondary
- Formamide
- Single-stranded DNA Positive Control
- Wash Buffer
- ABTS Solution (HRP substrate)
- Stop Solution

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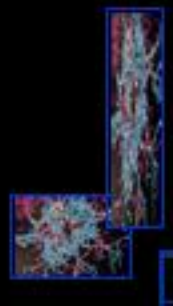
ssDNA Apoptosis ELISA

Materials required but not provided:

- 96-Well Microplate
- Nonfat dry milk
- Methanol/PBS
- S1 Nuclease

Equipment required:

- Adjustable volume pipettor with disposable tips
- 37ºC Waterbath or Incubator



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ssDNA Apoptosis ELISA

Advantages:

- HIGHLY SENSITIVE – Detect as few as 500 cells/well
- SPECIFIC FOR APOPTOSIS – Will not detect necrosis
- UNIVERSAL – Detects chromatin condensation, which is a hallmark of apoptosis
- VERIFIABLE – Positive control included

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ssDNA Apoptosis ELISA

Assay Instructions

Step 1. Seed cells in microplate and induce apoptosis.

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Step 2. Centrifuge plate at 200xg for 5 minutes.

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Step 3. Remove medium, add 200 µL of fixative and incubate at room temperature for 30 minutes.

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Step 4. Remove fixative and dry plates in 37°C waterbath for 20 minutes (or at room temperature for 1-2 hours).

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Assay Instructions

Step 11. Add 100 µL of ABTS solution and incubate for 15-60 minutes to allow binding to HRP.

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Assay Instructions

Step 6. Heat plates to 75ºC in an oven without lid for 20 minutes (or in a circulating waterbath for 10 minutes) to denature DNA.

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Assay Instructions

Step 7. Cool plates in refrigerator for 5 minutes, then remove formamide.

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Assay Instructions

Step 8. Add 200 µL of 3% nonfat dry milk in distilled water and incubate at 37ºC for 1 hour. This will block non-specific binding sites.

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Assay Instructions

Step 9. Remove milk and add 100 µL of Antibody Mixture. Incubate at room temperature for 30 minutes.

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Assay Instructions

Step 10. Wash plates 3 times with wash buffer, using 250 µL per well per wash.

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Step 5. Add 50 µL of formamide and incubate at room temperature for 10 minutes.

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Assay Instructions

Step 12. Add 100 µL of Stop Solution and read absorbance in a standard microplate reader at 405 nm.

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Assay Results