**{{ kit\_name|default('ELISA Kit') }}**

Catalog Number: {{ catalog\_number|default('') }}  
Lot Number: {{ lot\_number|default('') }}

## **INTENDED USE**

{{ intended\_use|default('') }}

## **TECHNICAL DETAILS**

## **OVERVIEW**

## **BACKGROUND**

{{ background\_text|default('') }}

## **ASSAY PRINCIPLE**

{{ assay\_principle|default('') }}

## **KIT COMPONENTS**

## **MATERIALS REQUIRED BUT NOT PROVIDED**

{{ required\_materials\_with\_bullets|default('') }}

## **REAGENT PREPARATION**

{{ reagent\_preparation|default('') }}

## **DILUTION OF STANDARD**

{{ dilution\_of\_standard|default('') }}

## **PREPARATIONS BEFORE ASSAY**

1. Prepare all reagents, samples, and standards according to the instructions.

2. Confirm that you have the appropriate non-supplied equipment available.

3. Spin down all components to the bottom of the tube before opening.

4. Don't let the 96-well plate dry out as this will inactivate active components.

5. Don't reuse tips and tubes to avoid cross-contamination. Avoid using reagents from different batches.

## **SAMPLE PREPARATION AND STORAGE**

{{ sample\_preparation\_and\_storage|default('') }}

## **SAMPLE COLLECTION NOTES**

{{ sample\_collection\_notes|default('') }}

## **SAMPLE DILUTION GUIDELINE**

{{ sample\_dilution\_guideline }}

## **ASSAY PRINCIPLE**

{{ assay\_principle }}

## **SAMPLE PREPARATION AND STORAGE**

{{ sample\_preparation\_and\_storage }}

## **SAMPLE COLLECTION NOTES**

{{ sample\_collection\_notes }}

## **SAMPLE DILUTION GUIDELINE**

{{ sample\_dilution\_guideline }}

## **ASSAY PROTOCOL**

{{ assay\_protocol\_numbered }}

## **TYPICAL DATA / STANDARD CURVE**

This standard curve is for demonstration only. A standard curve must be run with each assay.

## **DATA ANALYSIS**

{{ data\_analysis }}

## **INTRA/INTER-ASSAY VARIABILITY**

Three samples of known concentration were tested on one plate to assess intra-assay precision.

Three samples of known concentration were tested in separate assays to assess inter-assay precision.

## **REPRODUCIBILITY**

Samples were tested in four different assay lots to assess reproducibility.

## **DATA ANALYSIS**

{{ data\_analysis|default('') }}

|  |  |  |  |
| --- | --- | --- | --- |
| **Description** | **Quantity** | **Volume** | **Storage** |
| {{ reagent\_1\_name }} | {{ reagent\_1\_quantity }} | {{ reagent\_1\_volume }} | {{ reagent\_1\_storage }} |
| {{ reagent\_2\_name }} | {{ reagent\_2\_quantity }} | {{ reagent\_2\_volume }} | {{ reagent\_2\_storage }} |
| {{ reagent\_3\_name }} | {{ reagent\_3\_quantity }} | {{ reagent\_3\_volume }} | {{ reagent\_3\_storage }} |
| {{ reagent\_4\_name }} | {{ reagent\_4\_quantity }} | {{ reagent\_4\_volume }} | {{ reagent\_4\_storage }} |
| {{ reagent\_5\_name }} | {{ reagent\_5\_quantity }} | {{ reagent\_5\_volume }} | {{ reagent\_5\_storage }} |
| {{ reagent\_6\_name }} | {{ reagent\_6\_quantity }} | {{ reagent\_6\_volume }} | {{ reagent\_6\_storage }} |
| {{ reagent\_7\_name }} | {{ reagent\_7\_quantity }} | {{ reagent\_7\_volume }} | {{ reagent\_7\_storage }} |
| {{ reagent\_8\_name }} | {{ reagent\_8\_quantity }} | {{ reagent\_8\_volume }} | {{ reagent\_8\_storage }} |
| {{ reagent\_9\_name }} | {{ reagent\_9\_quantity }} | {{ reagent\_9\_volume }} | {{ reagent\_9\_storage }} |
| {{ reagent\_10\_name }} | {{ reagent\_10\_quantity }} | {{ reagent\_10\_volume }} | {{ reagent\_10\_storage }} |
| {{ reagent\_11\_name }} | {{ reagent\_11\_quantity }} | {{ reagent\_11\_volume }} | {{ reagent\_11\_storage }} |

|  |  |
| --- | --- |
| **Capture/Detection Antibodies** | {{ technical\_details\_table[0].value if technical\_details\_table and 0 < technical\_details\_table|length else 'N/A' }} |
| **Specificity** | {{ technical\_details\_table[1].value if technical\_details\_table and 1 < technical\_details\_table|length else 'N/A' }} |
| **Standard Protein** | {{ technical\_details\_table[2].value if technical\_details\_table and 2 < technical\_details\_table|length else 'N/A' }} |
| **Cross-reactivity** | {{ technical\_details\_table[3].value if technical\_details\_table and 3 < technical\_details\_table|length else 'N/A' }} |
| **Sensitivity** | {{ technical\_details\_table[4].value if technical\_details\_table and 4 < technical\_details\_table|length else 'N/A' }} |

Three samples of known concentration were tested on one plate to assess intra-assay precision.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sample** | **n** | **Mean (pg/ml)** | **Standard Deviation** |
| Sample 1 | {{ variability.intra\_assay.sample\_1.n if variability and variability.intra\_assay else 'N/A' }} | {{ variability.intra\_assay.sample\_1.mean if variability and variability.intra\_assay else 'N/A' }} | {{ variability.intra\_assay.sample\_1.sd if variability and variability.intra\_assay else 'N/A' }} |
| Sample 2 | {{ variability.intra\_assay.sample\_2.n if variability and variability.intra\_assay else 'N/A' }} | {{ variability.intra\_assay.sample\_2.mean if variability and variability.intra\_assay else 'N/A' }} | {{ variability.intra\_assay.sample\_2.sd if variability and variability.intra\_assay else 'N/A' }} |
| Sample 3 | {{ variability.intra\_assay.sample\_3.n if variability and variability.intra\_assay else 'N/A' }} | {{ variability.intra\_assay.sample\_3.mean if variability and variability.intra\_assay else 'N/A' }} | {{ variability.intra\_assay.sample\_3.sd if variability and variability.intra\_assay else 'N/A' }} |

Three samples of known concentration were tested in separate assays to assess inter-assay precision.

|  |  |  |  |
| --- | --- | --- | --- |
| **Sample** | **n** | **Mean (pg/ml)** | **Standard Deviation** |
| Sample 1 | {{ variability.inter\_assay.sample\_1.n if variability and variability.inter\_assay else 'N/A' }} | {{ variability.inter\_assay.sample\_1.mean if variability and variability.inter\_assay else 'N/A' }} | {{ variability.inter\_assay.sample\_1.sd if variability and variability.inter\_assay else 'N/A' }} |
| Sample 2 | {{ variability.inter\_assay.sample\_2.n if variability and variability.inter\_assay else 'N/A' }} | {{ variability.inter\_assay.sample\_2.mean if variability and variability.inter\_assay else 'N/A' }} | {{ variability.inter\_assay.sample\_2.sd if variability and variability.inter\_assay else 'N/A' }} |
| Sample 3 | {{ variability.inter\_assay.sample\_3.n if variability and variability.inter\_assay else 'N/A' }} | {{ variability.inter\_assay.sample\_3.mean if variability and variability.inter\_assay else 'N/A' }} | {{ variability.inter\_assay.sample\_3.sd if variability and variability.inter\_assay else 'N/A' }} |

Samples were tested in four different assay lots to assess reproducibility.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **Lot 1** | **Lot 2** | **Lot 3** | **Lot 4** | **SD** | **CV** |
| {{ reproducibility[0].sample if reproducibility and 0 < reproducibility|length else 'Sample 1' }} | {{ reproducibility[0].lot1 if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].lot2 if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].lot3 if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].lot4 if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].sd if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].cv if reproducibility and 0 < reproducibility|length else 'N/A' }} |
| {{ reproducibility[1].sample if reproducibility and 1 < reproducibility|length else 'Sample 2' }} | {{ reproducibility[1].lot1 if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].lot2 if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].lot3 if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].lot4 if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].sd if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].cv if reproducibility and 1 < reproducibility|length else 'N/A' }} |
| {{ reproducibility[2].sample if reproducibility and 2 < reproducibility|length else 'Sample 3' }} | {{ reproducibility[2].lot1 if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].lot2 if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].lot3 if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].lot4 if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].sd if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].cv if reproducibility and 2 < reproducibility|length else 'N/A' }} |

|  |  |
| --- | --- |
| **Capture/Detection Antibodies** | {{ technical\_details.capture\_detection antibodies if technical\_details else 'N/A' }} |
| **Specificity** | {{ technical\_details.specificity if technical\_details else 'N/A' }} |
| **Standard Protein** | {{ technical\_details.standard protein if technical\_details else 'N/A' }} |
| **Cross-reactivity** | {{ technical\_details.cross\_reactivity if technical\_details else 'N/A' }} |
| **Sensitivity** | {{ technical\_details.sensitivity if technical\_details else 'N/A' }} |

**Standard curve data:**

{{ standard\_curve\_table|safe }}

*This standard curve is for demonstration only. A standard curve must be run with each assay.*

Samples were tested in four different assay lots to assess reproducibility.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sample** | **Lot 1** | **Lot 2** | **Lot 3** | **Lot 4** | **SD** | **CV** |
| {{ reproducibility[0].sample if reproducibility and 0 < reproducibility|length else 'Sample 1' }} | {{ reproducibility[0].lot1 if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].lot2 if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].lot3 if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].lot4 if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].sd if reproducibility and 0 < reproducibility|length else 'N/A' }} | {{ reproducibility[0].cv if reproducibility and 0 < reproducibility|length else 'N/A' }} |
| {{ reproducibility[1].sample if reproducibility and 1 < reproducibility|length else 'Sample 2' }} | {{ reproducibility[1].lot1 if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].lot2 if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].lot3 if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].lot4 if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].sd if reproducibility and 1 < reproducibility|length else 'N/A' }} | {{ reproducibility[1].cv if reproducibility and 1 < reproducibility|length else 'N/A' }} |
| {{ reproducibility[2].sample if reproducibility and 2 < reproducibility|length else 'Sample 3' }} | {{ reproducibility[2].lot1 if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].lot2 if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].lot3 if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].lot4 if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].sd if reproducibility and 2 < reproducibility|length else 'N/A' }} | {{ reproducibility[2].cv if reproducibility and 2 < reproducibility|length else 'N/A' }} |

## **DISCLAIMER**

This material is sold for in-vitro use only in manufacturing and research. This material is not suitable for human use. It is the responsibility of the user to undertake sufficient verification and testing to determine the suitability of each product's application. The statements herein are offered for informational purposes only and are intended to be used solely for your consideration, investigation and verification.