**{{ 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|default('') }}

## **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|default('') }}

## **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' }} |