**ELISA Kit**

**Catalog No:** N/A

**Lot No:** SAMPLE

## INTENDED USE

This kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of LMNB2 in human tissue homogenates, cell lysates and other biological fluids.

## TEST PRINCIPLE

The microtiter plate provided in this kit has been pre-coated with an antibody specific to LMNB2. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to LMNB2. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain LMNB2, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 ± 10 nm. The concentration of LMNB2 in the samples is then determined by comparing the O.D. of the samples to the standard curve.  
  
Average the duplicate readings for each standard, control and sample, then subtract the average zero standard optical density. Construct a standard curve by plotting the mean O.D. and concentration for each standard and draw a best fit curve through the points on the graph or create a standard curve on log-log graph paper with LMNB2 concentration on the y-axis and absorbance on the x-axis. Using plotting software, (for instance, curve expert 1.30), is also recommended. If samples have been diluted, the concentration read from the standard curve must be multiplied by the dilution factor.

## TECHNICAL DETAILS

|  |  |
| --- | --- |
| Species |  |
| Sensitivity |  |
| Detection Range |  |
| Sample Type |  |

## OVERVIEW

## BACKGROUND

Kallikreins are a group of serine proteases with diverse physiological functions.   
 Kallikrein 1 (KLK1) is a tissue kallikrein that is primarily expressed in the kidney, pancreas, and salivary glands.  
 It plays important roles in blood pressure regulation, inflammation, and tissue remodeling through the kallikrein-kinin system.  
 KLK1 specifically cleaves kininogen to produce the vasoactive peptide bradykinin, which acts through bradykinin receptors to mediate various biological effects.  
 Studies have implicated KLK1 in cardiovascular homeostasis, renal function, and inflammation-related processes.

## KIT COMPONENTS/MATERIALS PROVIDED

## REQUIRED MATERIALS THAT ARE NOT SUPPLIED

## ELISA Kit ELISA STANDARD CURVE EXAMPLE

{'concentrations': ['0', '62.5', '125', '250', '500', '1000', '2000', '4000'], 'od\_values': ['0.028', '0.061', '0.143', '0.227', '0.405', '0.631', '1.118', '1.902']}

## INTRA/INTER-ASSAY VARIABILITY

## REPRODUCIBILITY

## PREPARATIONS BEFORE THE EXPERIMENT

## DILUTION OF ELISA Kit STANDARD

## SAMPLE PREPARATION AND STORAGE

## SAMPLE COLLECTION NOTES

## SAMPLE DILUTION GUIDELINE

## ASSAY PROTOCOL

## DATA ANALYSIS

## BACKGROUND ON ELISA Kit

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