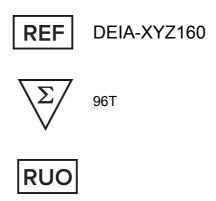




# Human KLK14 ELISA Kit



This product is for research use only and is not intended for diagnostic use.

For illustrative purposes only. To perform the assay the instructions for use provided with the kit have to be used.

#### Creative Diagnostics

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#### PRODUCT INFORMATION

#### Intended Use

The Human KLK-14 (Kallikrein 14) ELISA kit is an in vitro enzyme-linked immunosorbent assay for the quantitative measurement of human KLK-14 in serum, plasma, and cell culture supernatants.

### Principles of Testing

This assay employs an antibody specific for human KLK-14 coated on a 96-well plate. Standards and samples are pipetted into the wells and KLK-14 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-human KLK-14 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of KLK-14 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

#### Storage

The entire kit may be stored at -20°C for up to 1 year from the date of shipment. Avoid repeated freeze-thaw cycles. The kit may be stored at 4°C for up to 6 months. For extended storage, it is recommended to store at -80°C.

### **Assay Procedure**

- Prepare all reagents, samples and standards as instructed in the manual.
- 2. Add 100 µl of standard or sample to each well.
- 3. Incubate 2.5 h at RT or O/N at 4°C.
- 4. Add 100 µl of prepared biotin antibody to each well.
- 5. Incubate 1 h at RT.
- 6. Add 100 µl of prepared Streptavidin solution to each well.
- 7. Incubate 45 min at RT.
- 8. Add 100 µl of TMB One-Step Substrate Reagent to each well.
- Incubate 30 min at RT.
- 10. Add 50 µl of Stop Solution to each well.
- 11. Read at 450 nm immediately.

#### Calculation

Calculate the mean absorbance for each set of duplicate standards, controls and samples, and subtract the average zero standard optical density. Plot the standard curve on log-log graph paper or using Sigma plot software, with standard concentration on the x-axis and absorbance on the y-axis. Draw the best-fit straight



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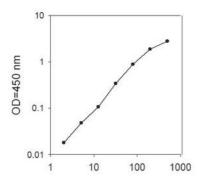
Fax: 1-631-938-8221



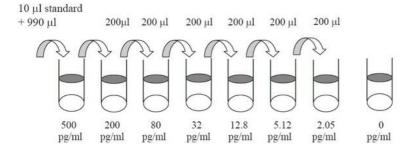
Email: info@creative-diagnostics.com

line through the standard points.

### **Typical Standard Curve**



Human KLK-14 concentration (pg/ml)



#### Precision

Intra-Assay CV%: <10%

Inter-Assay CV%: <12%

### **Detection Range**

1.5 pg/ml - 500 pg/mL

### Sensitivity

1.5 pg/mL

### Specificity

This ELISA antibody pair detects human KLK14. Other species not determined.

### Linearity



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Sample Type		Serum	Plasma	Cell Culture Media
1:2	Average % of Expected	113.6	119.4	110.8
	Range (%)	104-122	104-130	101-120
1:4	Average % of Expected	101.0	110.1	110.0
	Range (%)	95-107	98-120	102-118

## Recovery

Sample Type	Average % Recovery	Range (%)
Serum	122.0	101-143
Plasma	99.53	85-110
Cell culture media	98.38	92-105