# **RENAL DISEASE**

## Immunoassays

# HUMAN sRAGE ELISA

# Cat. No.: RD191116200R

## **RUO**

### **Intended use**

The RD191116200R Human sRAGE ELISA is a sandwich enzyme immunoassay for the quantitative measurement of human sRAGE (soluble receptor for advanced glycation end products).

- > It is intended for research use only
- The total assay time is less than 4.5 hours
- The kit measures sRAGE in serum and plasma (EDTA, citrate, heparin)
- Assay format is 96 wells
- > Standard is recombinant protein based
- > Quality Controls are human serum based
- Components of the kit are provided ready to use, concentrated or lyophilized

## **Clinical application**

- > Renal disease
- > Metabolic syndrome
- > Glucose and lipid homeostase

## Immunoassays

### **Test principle**

In the Biovendor Human sRAGE ELISA, standards, quality controls and samples are incubated in microplate wells pre-coated with polyclonal anti-human sRAGE antibody. After 120 minutes incubation and washing, biotin labelled polyclonal anti-human sRAGE antibody is added and incubated with captured sRAGE for 60 minutes. After another washing, streptavidin-HRP conjugate is added. After 30 minutes incubation and the last washing step, the

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Assay format	Sandwich ELISA, Biotin-labelled antibody, 96 wells/kit
Samples	Plasma-EDTA, Plasma-Citrate, Plasma-Heparin, Serum,
Controls	QC-Low, QC-High
Standards	50 to 3200 pg/ml
Limit of detection	Limit of detection (LOD) (defined as concentration of analyte giving absorbance higher than mean absorbance of blank* plus three standard deviations of the absorbance of blank: $A_{blank} + 3xSD_{blank}$ ) is calculated from the real human sRAGE values in wells and is: 19.2 pg/ml.

\* Dilution Buffer is pipetted into Blank wells.



remaining conjugate is allowed to react with the substrate solution (TMB). The reaction is stopped by addition of acidic solution and absorbance of the resulting yellow product is measured. The absorbance is proportional to the concentration of sRAGE. A standard curve is constructed by plotting absorbance values versus sRAGE concentrations of standards, and concentrations of unknown samples are determined using this standard curve.

### **Summary of protocol**

- Reconstitute QCs and Master Standard and prepare set of standards
- · Dilute samples 3×
- · Add 100 µl Standards, QCs and samples
- · Incubate at RT for 2 hours/300 rpm
- · Wash plate 5 times
- · Add 100 µl Biotin Labelled Antibody
- · Incubate at RT for 1 hour/300 rpm
- · Wash plate 5 times
- · Add 100 µl Streptavidin-HRP Conjugate
- · Incubate at RT for 30 min/300 rpm
- · Wash plate 5 times
- · Add 100 µl Substrate Solution
- Incubate at RT for 10 min
- · Add 100 µl Stop Solution
- · Read absorbance and calculate results

### **Related products**

- Soluble Advanced glycation end product-specific receptor Human E. coli RD172116100
- Soluble Advanced glycation end product-specific receptor Human HEK293 RD172116100-HEK
- Soluble Advanced glycation end product-specific receptor (sRAGE) Human, Sheep Polyclonal Antibody RD184116100

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