**Intended use**

The RD191021100 Human PMN Elastase ELISA is a sandwich enzyme immunoassay for the quantitative measurement of the complex of human PMN elastase and α1-proteinase inhibitor (α1-PI) in plasma.

- The total assay time is less than 3 hours
- The kit measures PMN elastase in plasma (EDTA, citrate), exudate, bronchoalveolar lavage fluid, cerebrospinal fluid and seminal plasma
- Assay format is 96 wells
- Components of the kit are provided ready to use, concentrated or lyophilized

**Clinical application**

- Immune Response, Infection and Inflammation
**Test principle**

In the BioVendor Human PMN Elastase ELISA, Standards, Quality Controls and samples are incubated in microplate wells pre-coated with polyclonal antibody. After 60 minutes incubation and washing, polyclonal antibody, conjugated with horseradish peroxidase (HRP) is added to the wells and incubated for 60 minutes with captured PMN elastase/α1-PI complex. Following another washing step, the remaining HRP 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 PMN elastase. A standard curve is constructed by plotting absorbance values against 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 100×
- Add 100 μl Standards, QCs and samples
- Incubate at RT for 1 hour/700 rpm
- Wash plate 4 times
- Add 150 μl Conjugate Solution
- Incubate at RT for 1 hour/700 rpm
- Wash plate 4 times
- Add 200 μl Substrate
- Incubate at RT for 20 min
- Add 50 μl Stop Solution
- Read absorbance and calculate results