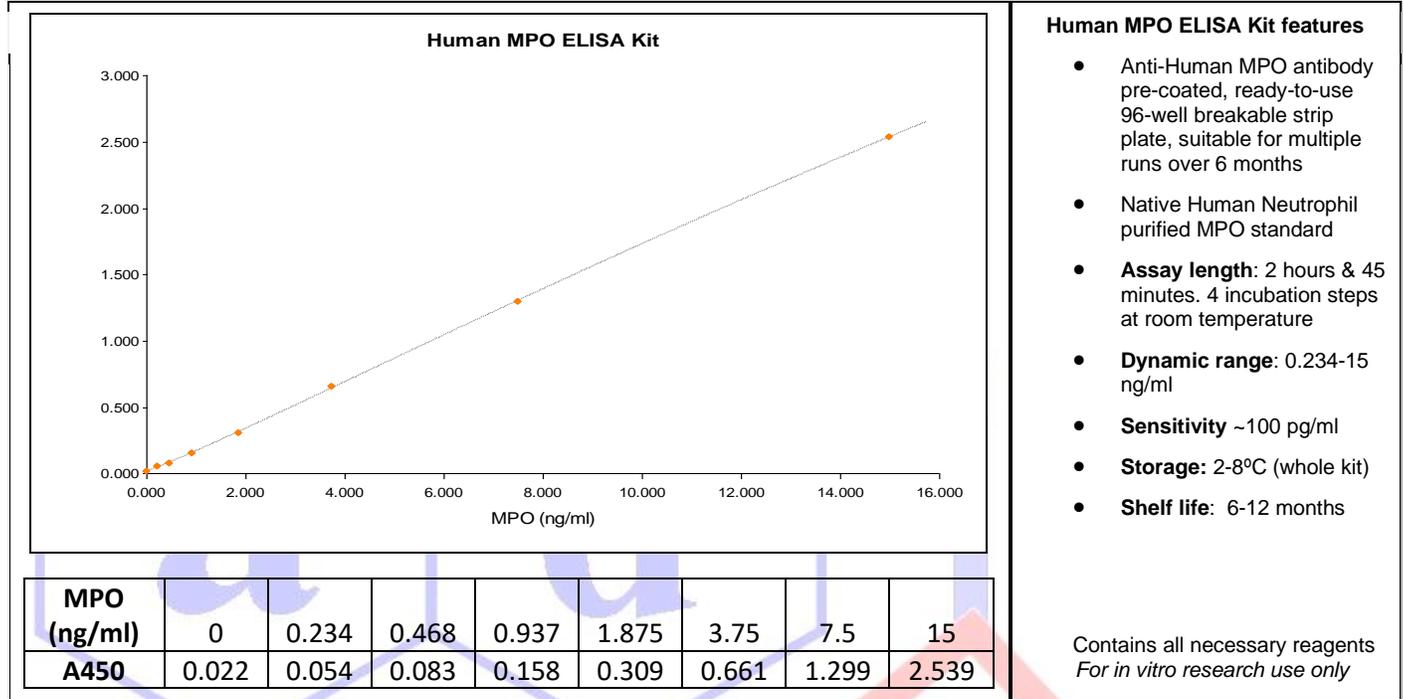


**Human MPO ELISA Kit Cat# MPO-100**

The Human MPO ELISA Kit is a highly sensitive sandwich ELISA for the measurement of Human MPO in serum, plasma, culture supernatants, and other appropriately qualified matrices



**Human MPO ELISA Kit features**

- Anti-Human MPO antibody pre-coated, ready-to-use 96-well breakable strip plate, suitable for multiple runs over 6 months
- Native Human Neutrophil purified MPO standard
- **Assay length:** 2 hours & 45 minutes. 4 incubation steps at room temperature
- **Dynamic range:** 0.234-15 ng/ml
- **Sensitivity** ~100 pg/ml
- **Storage:** 2-8°C (whole kit)
- **Shelf life:** 6-12 months

Contains all necessary reagents  
*For in vitro research use only*

**Assay Procedure: Allow all reagents to reach room temperature. Arrange and label required number of strips.**

- Step 1.** Pipette 100 ul of appropriately diluted samples and calibrators into wells and incubate for 1 hour at room temperature.
- Step 2.** Wash the wells 3X with 300 ul of wash buffer for each well
- Step 3.** Add 100 ul of Biotin conjugated detection antibody to each well and incubate for 1 hour at room temperature
- Step 4.** Wash the wells 3X with 300 ul of wash buffer for each well
- Step 5.** Add 100 ul of Streptavidin HRP conjugated detection antibody to each well and incubate for 30 minutes at room temperature
- Step 6.** Wash the wells 3X with 300 ul of wash buffer for each well
- Step 7.** Add 100 ul of TMB Substrate solution to all wells, mix gently, and incubate at room temperature for 15 minutes.
- Step 8.** Pipette 100 ul of stop solution into each well and mix gently. Measure at 450 nm w/ 630 nm as a reference filter if available.

**Performance Characteristics**

**Sensitivity:** ~100 pg/ml  
**Average recovery:** 87.61%  
**Average linearity:** 90.3%  
**Precision:** Intra-assay: >10% Inter-assay: >10%  
**Species cross-reactivity:** >0.02% Mouse

**Minimum recommended dilution**

**Serum and Plasma:** 10-fold  
**Culture supernatant:** 2-fold

**Note:** Minimum recommended dilution represents the dilution which is needed to eliminate matrix interference effects. All samples must be diluted to at least the minimum recommended ratio. Samples may be further diluted if the sample values fall within the standard curve, if sample volume is to be preserved, or if the sample value is above the highest OD on the standard curve

**General Information**

Myeloperoxidase (MPO) is a peroxidase enzyme (EC 1.11.1.7) most abundantly present in neutrophil granulocytes. The 150-kDa MPO is a dimer consisting of two 15-kDa light chains and two variable-weight glycosylated heavy chains bound to a prosthetic heme group. Myeloperoxidase (MPO) is an enzymatic mediator of several inflammatory cascades and higher serum levels have been associated with increased risk of adverse cardiovascular events. As a result, MPO and its downstream inflammatory pathways represent attractive targets for both prognostic and therapeutic intervention in the prophylaxis of atherosclerotic cardiovascular disease.