



Human myeloperoxidase,MPO ELISA Kit

Product Code	CSB-E08721h
Abbreviation	MPO
Protein Biological Process 1	Oxidative Stress
Uniprot No.	P05164
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.156 ng/mL-10 ng/mL
Sensitivity	0.039 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Gene Names	MPO
Tag Info	quantitative
Protein Description	Sandwich

Description

This Human myeloperoxidase (MPO) ELISA Kit is suitable for qualitatively determining MPO concentrations in multiple biological fluids, including human serum, plasma, and tissue homogenates in vitro. MPO is the heme-binding protein found in the azurophilic granules of neutrophils. It is critical in innate immune responses. MPO makes pus green and catalyzes the conversion of hydrogen peroxide to hypochlorous acid that kills bacteria and other invading pathogens. MPO plays a critical role in the microbicidal activity of neutrophils. Activated neutrophils release MPO into the phagolysosomes or the extracellular spaces. Together with hydrogen peroxide and chloride ion, MPO constitutes the cytotoxic mediators in infections.

This kit uses the quantitative sandwich-based enzyme immunoassay technique to measure the amount of human MPO in the sample. Standards and samples are respectively added to the microplate wells pre-coated with an anti-human MPO antibody. HRP-avidin and TMB substrate are piped into the microplate in turn. The capture antibody pre-coated on the plate captures the MPO in the human samples. Avidin on the enzyme label binds to the MPO of the sample, forming immune complexes. The color renders blue after the addition of TMB



substrate. The addition of the stop solution into the wells immediately turns the blue into yellow. The concentration of MPO in the samples is directly proportional to the OD value (at 450nm). Each manufactured lot of this ELISA kit was quality tested for criteria such as sensitivity, specificity, precision, recovery, linearity, and lot-to-lot consistency. See the manual for more information on validation.