

Human MPO ELISA Kit (2 plates)

Catalogue No.:	BEK-2156-2P
Description:	The human MPO Kit is a sandwich ELISA. The capture antibody is a polyclonal human MPO antibody pre-coated onto the 96-well strip plates provided in the kit. Human test samples and standards of known MPO concentration are added to these wells and allowed to complex with the bound MPO antibody. A biotinylated human MPO polyclonal antibody is then added. This detection antibody binds to the antigen thus completing the sandwich. After washing, an enzyme Avidin-Biotin-Peroxidase complex (ABC) is added which binds to the second antibody. The peroxidase substrate TMB is added to induce a coloured reaction product. The intensity of this coloured product is directly proportional to the concentration of MPO present in the samples. The purpose of this kit is the in-vitro quantitative determination of human MPO in samples such as sera, plasma, tissue lysates and cell culture supernates. This kit has been configured for research use only and is not to be used in diagnostic or clinical procedures.
Batch No.:	See product labels
Antigen:	FUNCTION: Part of the host defense system of polymorphonuclear leukocytes. It is responsible for microbicidal activity against a wide range of organisms. In the stimulated PMN, MPO catalyzes the production of hypohalous acids, primarily hypochlorous acid in physiologic situations, and other toxic intermediates that greatly enhance PMN microbicidal activity. MPO is an important marker for myeloid cells, from the promyelocyte stage and to the mature forms. CATALYTIC ACTIVITY: Donor + H ₂ O ₂ = oxidized donor + 2 H ₂ O. CATALYTIC ACTIVITY: Cl ⁻ + H ₂ O ₂ = HOCl + 2 H ₂ O. COFACTOR: Binds 1 calcium ion per heterodimer. COFACTOR: Binds 1 heme B (iron-protoporphyrin IX) group covalently per heterodimer. SUBUNIT: Tetramer of two light chains and two heavy chains. SUBCELLULAR LOCATION: Lysosome. ALTERNATIVE PRODUCTS: At least 3 named isoforms produced by alternative splicing. DISEASE: Defects in MPO are the cause of myeloperoxidase deficiency (MPD). MPD is an autosomal recessive defect that results in disseminated candidiasis. SIMILARITY: Belongs to the peroxidase family. XPO subfamily.
Other Names:	MPO; EC 1.11.1.7; Myeloperoxidase;
Accession:	P05164 PERM_HUMAN;
Specificity:	Human MPO
Storage:	Store at 2-8C
Kit components:	The ELISA kit box contains 2 x 96-well pre-coated strip plates, protein standards, detection reagents, substrate buffer and detailed protocols.
Range:	0.312 ng/mL - 20 ng/mL
Sensitivity:	< 10 pg/ml
Kit protocol:	Please refer to our online product listing for current protocol/MSDS versions.

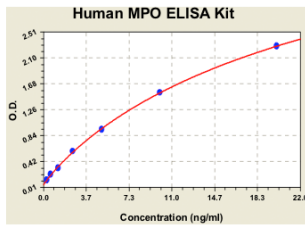
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Typical Human MPO ELISA Kit Standard Curve
(TMB reaction incubate at 37°C for 18 min)

Concentration	0.2ng/ml	0.312ng/ml	0.625ng/ml	1.25ng/ml	2.5ng/ml	5ng/ml	10ng/ml	20ng/ml
O.D.	0.060	0.132	0.222	0.322	0.596	0.951	1.541	2.290

This standard curve is for demonstration purposes only. A standard curve should be generated for each assay.



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