



[Go to Product page](#)

Datasheet for ABIN1672855

Myeloperoxidase ELISA Kit

1 Image

7 Publications

Overview

Quantity:	96 tests
Target:	Myeloperoxidase (MPO)
Binding Specificity:	AA 16-718
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse MPO/Myeloperoxidase
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Cell Lysate, Tissue Homogenate, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: M16-T718
Specificity:	Expression system for standard: NSO Immunogen sequence: M16-T718

Product Details

Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	Myeloperoxidase (MPO)
Alternative Name:	MPO (MPO Products)
Background:	<p>Protein 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 (By similarity). .</p> <p>Background: Myeloperoxidase(MPO) is a mammalian phagocyte hemoprotein thought to primarily mediate host defense reactions. It is abundantly expressed in neutrophils and secreted during their activation. Myeloperoxidase is part of the host defense system of human polymorphonuclear leukocytes, responsible for microbicidal activity against a wide range of organisms. It is located in the nucleus as well as in the cytoplasm. Intranuclear MPO may help to protect DNA against damage resulting from oxygen radicals produced during myeloid cell maturation and function.</p> <p>Synonyms: Myeloperoxidase,MPO,1.11.2.2,Myeloperoxidase light chain,Myeloperoxidase heavy chain,Mpo,</p> <p>Full Gene Name: Myeloperoxidase</p> <p>Cellular Localisation: Lysosome.</p>
Gene ID:	17523
UniProt:	P11247
Pathways:	Chromatin Binding

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
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Application Details

assay was recommended for both standard and sample testing.

Plate: Pre-coated

Protocol: mouse MPO ELISA Kit is based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for MPO has been precoated onto 96-well plates. Standards(NSO, M16-T718) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for MPO is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB are used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse MPO amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL, 156pg/mL mouse MPO standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, cell lysates, tissue homogenates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse MPO standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 1248, Standard deviation: 56.16, CV(%): 4.5
- Sample 2: n=16, Mean(pg/ml): 3528, Standard deviation: 179.93, CV(%): 5.1
- Sample 3: n=16, Mean(pg/ml): 6243, Standard deviation: 387.1, CV(%): 6.2,
- Sample 1: n=24, Mean(pg/ml): 1425, Standard deviation: 84.1, CV(%): 5.9
- Sample 2: n=24, Mean(pg/ml): 4127, Standard deviation: 247.6, CV(%): 6
- Sample 3: n=24, Mean(pg/ml): 6785, Standard deviation: 468.2, CV(%): 6.9

Restrictions: For Research Use only

Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

Storage: -20 °C, 4 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

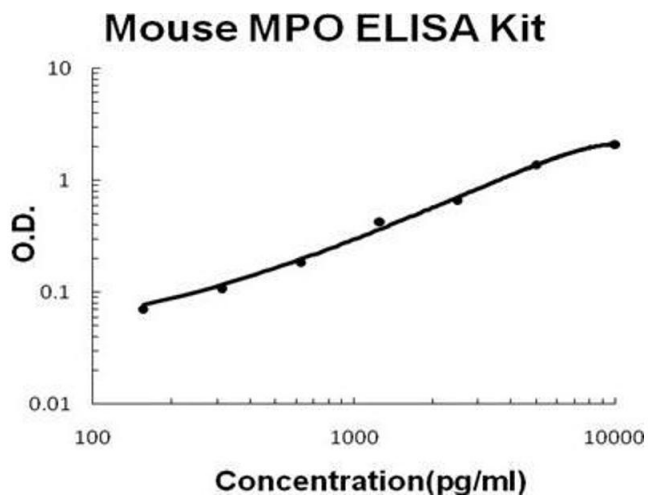
Expiry Date: 12 months

Publications

Product cited in: Sancakdar, Guven, Uysal, Deveci, Gültürk: "Important of Angiopoietic System in Evaluation of Endothelial Damage in Children with Crimean-Congo Hemorrhagic Fever." in: **The Pediatric infectious disease journal**, Vol. 34, Issue 8, pp. e200-5, (2015) ([PubMed](#)).

There are more publications referencing this product on: [Product page](#)

Images



ELISA

Image 1. Mouse MPO PicoKine ELISA Kit standard curve