For Research Use Only

Recombinant Human MPO protein (His Tag)

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Catalog Number: Eg0511

Basic Information

Species:
Human

Purity:
>90 %, SDS-PAGE

Tag:
His Tag

Technical Specifications

Purity:
>90 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Human MPO protein Ala49-Ser745 (Accession# P05164-1) with a His tag at the C-terminus.

GeneID:
4353

Accession:
P05164-1

Predicted Molecular Mass:
82.7 kDa

SDS-PAGE:
90-110 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Not tested

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

MPO(myeloperoxidase) is a peroxidase enzyme presented in the azurophilic granules of polymorphonuclear (PMN) leukocytes and monocytes. Plasma concentration of MPO can be used as a specific marker of PMN activation. MPO catalyzes the production of hypochlorous acid (HClO) from hydrogen peroxide (H_2O_2) and chloride anion (Cl^-, or the equivalent from a non-chlorine halide). This enzymatic system plays an important role in human defense against microorganisms. The serum/plasma MPO levels have been associated with a variety of clinical conditions including inflammatory diseases, atherosclerosis, ischaemic stroke, hypertension, heart failure, risk of cardiovascular events and so on.

References

1. Bainton & D., F. et al. (1971) Journal of Experimental Medicine. 134(4), 907-934.
2. Seymour J. et al. (1970) Science. 169(3950), 1095-1097.
3. Heinecke JW. et al. (1997) Curr Opinion Lip. 8:268-274.
4. Hazen SL. et al. (1997) J Clin Invest. 99: 2075-2081.
5. Re G, A. et al. (1997) Eur J Emerg Med. 4: 5-9.
6. MacMahon S. et al. (1990) Lancet. 335: 765-774.
7. Deuschl F G. et al. (2014) The Journal of Heart and Lung Transplantation. 33(4):S164.
8. Hoy A. et al. (2001) European Journal of Human Genetics Ejhg. 9(10):780-786.

Synonyms

MPO, EC:1.11.2.2, myeloperoxidase

For technical support and original validation data for this product please contact

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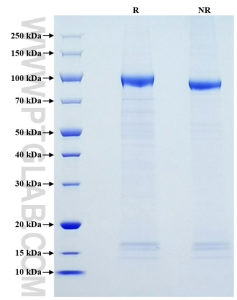
Selected Validation Data



Purity of Recombinant Human MPO was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.