Specification

Product name:	Recombinant human MPO antigen (MPO-H)
Source:	E.coli derived
Accession #:	/
SDS-PAGE:	15 kDa, reducing conditions
Construction：	MPO-H with 6His tag at N-terminal
Predicted Molecular Mass:	13kDa
Activity:	Immunoreactivity was confirmed by reacting with monoclonal antibodies specific to human MPO .
Application:	ELISA, immunology, others unspecified.
Form:	Liquid
Formulation:	20 mM Tris, 300 mM NaCl, 8M Urea, pH 8.0
Stability & Storage:	Stable at -80°C
Shipping condition:	The product is shipped on ice pack.Upon receiving, store it immediately at the recommended temperature.
Conc. Determined:	BCA
Purity:	＞90%

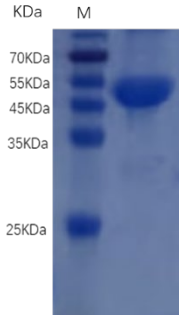
SDS-PAGE

Recombinant Human MPO Antigen

Product Datasheet

Catalog Number: RXS006Ag1C-1000

请粘贴本产品对应的二维码



Greater than 90% as determined by reducing SDS-PAGE. (QC verified).

BACKGROUND

Myeloperoxidase (MPO) is a heme-containing enzyme belonging to the XPO subfamily of peroxidases. It is an abundant neutrophil and monocyte glycoprotein that catalyzes the hydrogen peroxide-dependent conversion of chloride, bromide, and iodide to multiple reactive species. Post-translational processing of MPO involves the insertion of a heme moiety and the proteolytic removal of both a propeptide and a 6 aa internal peptide. This results in a disulfide-linked dimer composed of a 60 kDa heavy and 12 kDa light chain that associate into a 150 kDa enzymatically active tetramer. The tetramer contains two heme groups and one disulfide bond between the heavy chains. Alternate splicing generates two additional isoforms of MPO, one with a 32 aa insertion in the light chain, and another with a deletion of the signal sequence and part of the propeptide. Human and mouse MPO share 87% aa sequence identity. MPO activity results in protein nitrosylation and the formation of 3-chlorotyrosine and dityrosine crosslinks. MPO is also associated with a variety of other diseases, and inhibits vasodilation in inflammation by depleting the levels of NO. Serum albumin functions as a carrier protein during MPO movement to the basolateral side of epithelial cells. MPO is stored in neutrophil azurophilic granules. Upon cellular activation, it is deposited into pathogen-containing phagosomes.

References:

1. Biomarker-guided IL-5 blockade achieves steroid-free MPO-ANCA seroconversion in EGPA
2. Predictive value of serum myeloperoxidase (MPO) concentration combined with triglyceride-glucose index (TyG) for major adverse cardiaovascular events (MACE) in patients with coronary heart disease
3. MPO and its role in cancer, cardiovascular and neurological disorders: An update
4. MPO interacts with hRSV particles, contributing to the virucidal effects of NETs against clinical and laboratory hRSV isolates
5. Regulatory T cells effectively downregulate the autoimmune anti-MPO response and ameliorate anti-MPO induced glomerulonephritis in mice.

Shenzhen Ruimeng Innovation Biotechnology Co., Ltd.
Room 1302-1305, 13F, Building D3, Nanshan Smart Park (Phase II),
No. 1001 Xueyuan Avenue, Nanshan District, Shenzhen City
Tel: +86 755 2616 5996
Web: www.rm-bio.com
PRC: 518055
Fax: +86 755 2616 5986
E-mail: rmi@rm-bio.com