

Product datasheet for AM26227PU-N

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Myeloperoxidase (MPO) Mouse Monoclonal Antibody [Clone ID: 266-6K1]

Product data:

Product Type: Primary Antibodies

Clone Name: 266-6K1
Applications: ELISA, WB

Recommended Dilution: Immunoassay (as coat and detector): The typical starting working dilution is 1:50.

Western blot (1): Samples were subjected to SDS-PAGE and transferred to PVDF membrane

(Ref.1). The typical starting working dilution is 1:50.

Positive control: Neutrophils, HL-60 cells.

Negative control: Erythocytes.

Does not work in Immunohistochemistry on paraffin sections.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Specificity: This antibody recognizes human myeloperoxidase (MPO), an ~135 glycoprotein expressed in

all cells of the myeloid linage.

Formulation: PBS

State: Purified

State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin Preservative: 0.02% sodium azide

Concentration: lot specific

Purification: Protein G

Conjugation: Unconjugated Storage: Store at 2 - 8 °C.

Stability: Shelf life: one year from despatch.

Gene Name: myeloperoxidase

Database Link: Entrez Gene 4353 Human

P05164





Background:

MPO functions as an $\alpha2\beta2$ heteromultimer consisting of two heavy (α) and two light (β) chains of 55 and 15 kDa respectively. MPO is abundantly present in azurophilic granules of polymorphonuclear neutrophils (PMNs). It is an important enzyme used during phagocytic lysis of engulfed foreign particles which takes part in the defense of the organism through production of hypochlorous acid (HOCl), a potent oxidant. 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. Upon activation of neutrophils, MPO can be rapidly released and as such useful in body fluids as marker for inflammatory status.

Involvement of MPO has been described in numerous diseases such as atherosclerosis, lung cancer, Alzheimer's disease, inflammatory bowel disease and multiple sclerosis. Autoimmune antibodies to MPO (so called ANCA) are involved in Wegener's disease. Since the discovery of MPO deficiency, initially regarded as rare and restricted to patients suffering from severe infections, MPO has attracted more clinical attention.

Synonyms:

MPO