

## Product datasheet for AM26227BT-N

## OriGene Technologies, Inc.

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## 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: The antibody can be used 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 section.

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

Label: Biotin

State: Liquid 0.2 µm filtered lg fraction

Stabilizer: 0.1% BSA

Preservative: 0.02% sodium azide

**Concentration:** lot specific

**Purification:** Protein G Chromatography

Conjugation: Biotin

Storage: Store undiluted 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  $\alpha 2\beta 2$  heteromultimer consisting of two heavy ( $\alpha$ ) and two light ( $\beta$ )

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