

## Monoclonal Antibody to PR3 / C-ANCA - Liquid

<b>Alternate names:</b>	AGP7, Leukocyte proteinase 3, MBN, Myeloblastin, NP-4, Neutrophil proteinase 4, P29, PR-3, PRTN3, Proteinase 3, Wegener autoantigen
<b>Catalog No.:</b>	AM32114PU-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0,1 mg/ml
<b>Background:</b>	<p>PR3 is a major antigen recognized by autoantibodies directed against cytoplasmic proteins of neutrophilic granulocytes and monocytes (called anti-neutrophil cytoplasmic autoantibodies (ANCA)). ANCA are able to activate primed neutrophils to produce oxygen radicals and release lytic enzymes, including PR3. Proteinase 3 (PR3) was identified as the target antigen of ANCA in Wegener's granulomatosis (WG). ANCA directed against PR3 (PR3-ANCA) can interfere with the binding of PR3 to its physiological inhibitor alpha1-antitrypsin (alpha1-AT) and with the proteolytic activity of PR3. At the site of inflammation, PR3 can cleave the PR3-ANCA complex between these inhibiting ANCA and PR3 itself, leaving active PR3. Autoantibodies to PR3 are potent activators of the 5-lipoxygenase pathway in primed human neutrophils. Extracellular free arachidonic acid, as present at an inflammatory focus, synergizes with such autoantibodies to evoke full-blown lipid mediator generation, granule secretion and respiratory burst. Proteinase 3 (PR3) is a neutral serine proteinase, which is localized in the azurophilic granules of neutrophils and in granules of monocytes and can be detected in the membrane of secretory vesicles. PR3 degrades a number of extracellular matrix proteins such as elastin and inactivates human C1 inhibitor. Membrane-associated PR3 is also able to activate caspase-3 without triggering apoptosis of neutrophils, which is possibly a neutrophil survival mechanism. In addition, PR3 is involved in myeloid differentiation and is, therefore, also called myeloblastin</p>
<b>Uniprot ID:</b>	<a href="#">P24158</a>
<b>NCBI:</b>	<a href="#">9606</a>
<b>GeneID:</b>	<a href="#">5657</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Clone:</b>	PR3G-2
<b>Immunogen:</b>	Immunization of mice with a crude granule extract.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction (0.2 µm filtered) <b>Buffer System:</b> PBS <b>Preservatives:</b> 0,02% sodium azide <b>Stabilizers:</b> 0,1% BSA
<b>Applications:</b>	<b>Flow Cytometry.</b> <b>Immuinohistochemistry on frozen sections.</b>

**Western Blot.**

**Immunoassay.**

It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1/50.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody reacts to Proteinase 3 (PR3)

**Species Reactivity:**

**Tested:** Human.

**Storage:**

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. Shelf life: one year from despatch.