

Datasheet for ABIN2192032

**anti-PRTN3 antibody****2** Publications[Go to Product page](#)

## Overview

Quantity:	100 µg
Target:	PRTN3
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PRTN3 antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunoassay (IA)

## Product Details

Clone:	PR3G-2
Sterility:	0.2 µm filtered

## Target Details

Target:	PRTN3
Alternative Name:	Proteinase 3 ( <a href="#">PRTN3 Products</a> )
Background:	Monoclonal antibody PR3G-2 reacts with human proteinase 3 (PR3), a 30 kDa protein. 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

## Target Details

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. The monoclonal antibody PR3-G2 was produced by immunization of mice with a crude granule extract.

## Application Details

Application Notes:	For immunohistology, flow cytometry and Western blotting dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.
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Restrictions:	For Research Use only
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## Handling

Buffer:	PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide.
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Preservative:	Sodium azide
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Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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Storage:	4 °C
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Storage Comment:	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for one year.
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Expiry Date:	12 months
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Product cited in: Müller, Peri, Doni, Perruchoud, Landmann, Pasqualini, Mantovani: "High circulating levels of the IL-1 type II decoy receptor in critically ill patients with sepsis: association of high decoy receptor levels with glucocorticoid administration." in: **Journal of leukocyte biology**, Vol. 72, Issue 4, pp. 643-9, (2002) ([PubMed](#)).

Penton-Rol, Orlando, Polentarutti, Bernasconi, Muzio, Introna, Mantovani et al.: "Bacterial lipopolysaccharide causes rapid shedding, followed by inhibition of mRNA expression, of the IL-1 type II receptor, with concomitant up-regulation of the type I receptor and induction of ..." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 162, Issue 5, pp. 2931-8, (1999) ([PubMed](#)).