



**SZABO  
SCANDIC**

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](http://linkedin.com/company/szaboscandic)





## Murine Anti-Factor VIII

### Clone GMA-8021

Factor VIII (FVIII) is a heterodimer consisting of a heavy chain (ranging in mass from 90 to 200 kDa) bound via metal ions to a light chain (80 kDa). In plasma, FVIII circulates in an inactive form bound to von Willebrand factor. Following activation by factor Xa or thrombin, factor VIIIa can function as cofactor for the enzyme factor IXa in the activation of factor X in the presence of phospholipid and  $\text{Ca}^{2+}$ . Absent or defective FVIII is the cause of the X-linked recessive bleeding disorder hemophilia A. GMA-8021 (also known as 2-76) recognizes the A2 domain of FVIII, is strongly inhibitory<sup>1</sup>, and suitable for ELISA and bio-layer interferometry applications.

### Description

<b>Antibody Source:</b>	mouse monoclonal, IgG <sub>2a</sub>
<b>Antigen Species Bound:</b>	human, rhesus monkey
<b>Specificity:</b>	FVIII A2 domain, epitope within residues 484-508
<b>Immunogen:</b>	B-domain deleted recombinant human FVIII

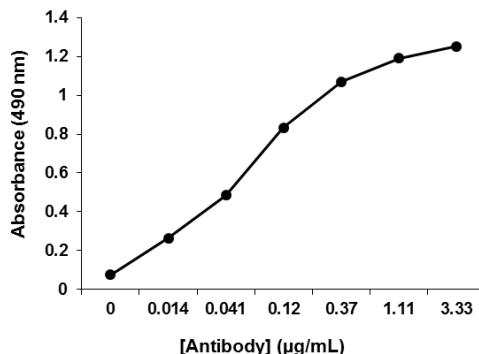
### Formulation and Storage

<b>Purity:</b>	IgG purified by protein G affinity chromatography from serum free cell culture supernatant.
<b>Product Formulation:</b>	Lyophilized from a $\geq 1$ mg/ml solution in 20 mM $\text{NaH}_2\text{PO}_4$ 0.15 M NaCl, 1.0% (w/v) mannitol, pH 7.4. Concentration determined by absorbance measurement at 280 nm and using an extinction coefficient of 1.4 ( $\epsilon_{0.1\%}$ ).
<b>Reconstitution:</b>	Reconstitute with deionized water.
<b>Storage:</b>	Aliquot and store at -20° C for prolonged periods. Avoid freeze-thaw cycles. Alternatively, add 0.02% (w/v) sodium azide and store at 4° C.
<b>Country of origin:</b>	USA
<b>Size Options:</b>	0.1 mg or 0.5 mg

### Applications

<b>Working Concentration:</b>	Approximately 1-5 µg/ml. Researcher should titer antibody in specific assay.
<b>ELISA:</b>	Binds immobilized human and rhesus FVIII.
<b>Immunoblotting:</b>	Does not blot.
<b>Inhibition:</b>	38000 Bethesda units/mg IgG <sup>1</sup>
<b>Affinity Constant (apparent K<sub>D</sub>):</b>	$K_D = 2 \text{ nM}, (k_{dis} = 9 \times 10^{-4} \text{ sec}^{-1})$ by bio-layer interferometry.

GMA-8021 binding in ELISA



### References

- [1] R.C. Markovitz, J.F. Healey, E.T. Parker, S.L. Meeks, P. Lollar. The diversity of the immune response to the A2 domain of human factor VIII. (2013). *Blood*. 121(14):2785-2795.
- [2] J. Gewirtz, M.A. Thornton, L. Rauova, M. Poncz. Platelet-delivered factor VIII provides limited resistance to anti-factor VIII inhibitors. (2008). *J Thromb Haemost*. 6(7):1160-1166.