




GENOVIS

Innovative Tools  
for Life Sciences



GENOVIS



# Business Areas



SmartEnzymes™



Antibodies



Bioprocess



Gene Therapy



Services

## Antibody Digestion

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### **FabRICATOR**<sup>®</sup> (IdeS)

Below hinge digestion of IgG

### **FabALACTICA**<sup>®</sup> (IgdE)

Above hinge digestion of human IgG1

### **FabDELLO**<sup>™</sup>

Above hinge digestion of human IgG1

### **FabRICATOR**<sup>®</sup> Z (IdeZ)

Below hinge digestion of mouse IgG

### **GingisKHAN**<sup>®</sup> (Kgp)

Above hinge digestion of human IgG1

### **FabULOUS**<sup>™</sup> (SpeB)

Above hinge digestion of IgG

### **IgMBRAZOR**<sup>™</sup>

Digestion of IgM

## Fusion Protein Digestion

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### **GlySERIAS**<sup>™</sup>

Hydrolysis of Flexible Linkers

## Antibody Conjugation

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### **GlyCLICK**<sup>®</sup>

Site-specific conjugation of IgG

### **TransGLYCIT**<sup>™</sup>

Transglycosylation of IgG

## Proteomics

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### **GingisREX**<sup>®</sup> (RgpB)

Arginine-specific protein digestion

## Glycan Profiling

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### **OmniGLYZOR**<sup>™</sup>

Hydrolysis of N- and mucin-type O-glycans

### **PNGase F**

Hydrolysis of N-glycans

### **OpeRATOR**<sup>®</sup>

O-glycan specific protein digestion

### **OglyZOR**<sup>®</sup>

Hydrolysis of core-1 O-glycans

### **SialEXO**<sup>®</sup>

Hydrolysis of sialic acids

### **FucosEXO**<sup>™</sup>

Hydrolysis of  $\alpha$ 1-2,3,4 fucose

### **GalactEXO**<sup>™</sup>

Hydrolysis of  $\beta$ 1-3,4 galactose

### **GalNAcEXO**<sup>™</sup>

Hydrolysis of  $\alpha$ -linked GalNAcs

### **GlycOCATCH**<sup>®</sup>

Enrichment of O-glycopeptides

## Antibody Deglycosylation

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### **GlycINATOR**<sup>®</sup> (EndoS2)

Hydrolysis of all Fc N-glycans

### **IgQZERO**<sup>®</sup> (EndoS)

Hydrolysis of Fc N-glycans

## Research Antibodies

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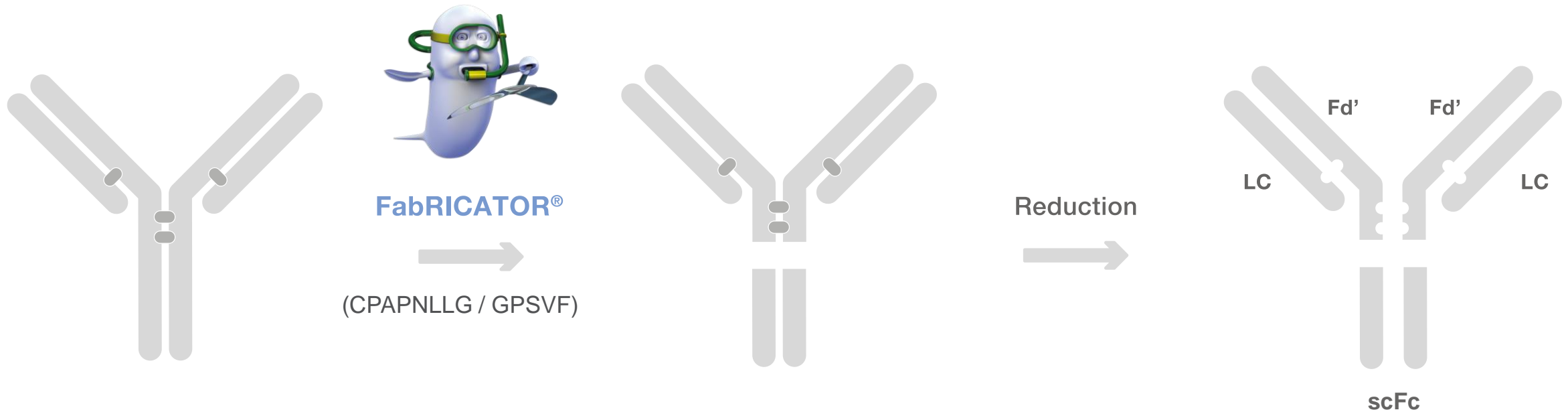
### **Anti-FabRICATOR**<sup>®</sup>

Detection of the FabRICATOR<sup>®</sup> enzyme

### **Anti-FabRICATOR**<sup>®</sup> Z

Detection of the FabRICATOR<sup>®</sup> Z enzyme

# FabRICATOR®



- Cysteine protease for the digestion of **several species and subclasses of IgG**
- Digestion of **human IgG1-4** and some classes of monkey, rat, sheep and rabbit
- Digestion at a **specific site below the hinge**
- Generation of **F(ab')<sub>2</sub>** and **Fc fragments** with **no risk of over-digestion**
- **No** reducing agents or cofactors required for optimal activity



# Available Product Formats



**FabRICATOR Lyophilized**  
**Lyophilized enzyme** for below hinge digestion of IgG



**FabRICATOR Immobilized**  
**Immobilized enzyme** for below hinge digestion of IgG in spin columns



**FabRICATOR Fab2 Kit**  
**Immobilized enzyme** and affinity resin for digestion of IgG and purification of fragments



**FabRICATOR HPLC**  
**Immobilized enzyme** for on-column digestion of IgG below the hinge



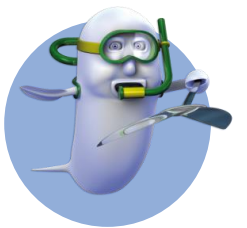
**FabRICATOR MagIC**  
**Immobilized enzyme** on magnetic beads for automated digestion of IgG below the hinge



**FabRICATOR Low Endotoxin**  
**Lyophilized enzyme** with low levels of endotoxin for below hinge digestion of IgG



**FabRICATOR Validation Kit**  
Three different **lyophilized** batches for validation of FabRICATOR-based analytical methods



# OmniGLYZOR™



- **Native deglycosylation** of antibodies, fusion proteins and other heavily glycosylated proteins
- **Fast and efficient** removal of N- and simple mucin-type O-glycans
- Deglycosylation in as little as one hour (optimization may be required for more heavily glycosylated proteins)
- Mixture of **immobilized PNGase F, O-glycosidase, sialidase and  $\alpha$ -GalNAcase**
- Option for an additional deglycosylation step under denaturing conditions



# SialEXO<sup>®</sup>



- **Sialidase mixture** for the removal of  $\alpha$ 2-3,  $\alpha$ 2-6 and  $\alpha$ 2-8-linked sialic acids
- **Fast and efficient** activity on both **N-** and **O-linked glycans** present on **native glycoproteins** and **released glycan** structures
- **Immobilized** format **reduces reaction time** without residual enzyme in the final sample
- **SialEXO 2-3** is **highly specific** for  $\alpha$ 2-3-linked sialic acids
- Included with OglyZOR and OpeRATOR products



# SmartEnzymes™

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