## Glycoproteomics Selection Guide — Deglycosylation

<table>
<thead>
<tr>
<th>Glycoproteomics Selection Guide — Deglycosylation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GlycoProfile I In-Gel Deglycosylation Kit</strong></td>
</tr>
<tr>
<td><strong>Product Number</strong></td>
</tr>
<tr>
<td><strong>Recommended Sample Size</strong></td>
</tr>
<tr>
<td><strong>Sample Scale</strong></td>
</tr>
<tr>
<td><strong>Features and Benefits</strong></td>
</tr>
</tbody>
</table>

### GlycoProfile I In-Gel Deglycosylation Kit

- **Product Number**: PP0510
- **Recommended Sample Size**: PAGE gel containing up to 5 mg of glycoprotein
- **Sample Scale**: Minimum of 1 year
- **Features and Benefits**: Solutions containing 1-2 mg of glycoprotein

### GlycoProfile II Enzymatic In-Solution Deglycosylation Kit

- **Product Number**: PP0201
- **Recommended Sample Size**: Solutions containing 1-2 mg of glycoprotein
- **Sample Scale**: Minimum of 20 reactions
- **Features and Benefits**: Solutions containing up to 200 mg of glycoprotein

### GlycoProfile IV Chemical Deglycosylation Kit

- **Product Number**: PP0510
- **Recommended Sample Size**: Solutions containing 1-2 mg of glycoprotein
- **Sample Scale**: Minimum of 1 year
- **Features and Benefits**: Solutions containing up to 200 mg of glycoprotein

### Native Enzymatic Deglycosylation Kit

- **Product Number**: EDEGLY
- **Recommended Sample Size**: Solutions containing up to 200 mg of glycoprotein
- **Sample Scale**: Minimum of 10 reactions
- **Features and Benefits**: Solutions containing up to 200 mg of glycoprotein

### Enzymatic Deglycosylation Kit

- **Product Number**: EDEGLY
- **Recommended Sample Size**: Solutions containing up to 200 mg of glycoprotein
- **Sample Scale**: Minimum of 10 reactions
- **Features and Benefits**: Solutions containing up to 200 mg of glycoprotein

### Components

- **Glycoproteins**: Deglycosylated and purified for downstream applications.
- **Enzymatic Deglycosylation**: Suitable for structure-function studies and MS analysis.
- **Native or denaturing conditions allow flexibility for downstream process.

### Features and Benefits

- **In-gel deglycosylation and digestion avoids extra preparative steps.
- **Highly purified enzymes prevent unwanted activities and products.
- **Reagents are optimized for direct MS analysis without extra clean-up steps.
- **Ensures high yield and quality of the protein core.
- **Complete deglycosylation in as short as 30 min for increased throughput.
- **Minimal degradation of protein core for more reliable MS data.
- **Glycoproteins are deglycosylated in their native state.
- **Core protein is suitable for structure-function studies or MS analysis.

### Storage Temperature

- **GlycoProfile I In-Gel Deglycosylation Kit**: 2-8 °C
- **GlycoProfile II Enzymatic In-Solution Deglycosylation Kit**: 2-8 °C
- **GlycoProfile IV Chemical Deglycosylation Kit**: 2-8 °C
- **Native Enzymatic Deglycosylation Kit**: 4 °C
- **Enzymatic Deglycosylation Kit**: 4 °C

### Shelf Life of Unused Product

- **GlycoProfile I In-Gel Deglycosylation Kit**: Minimum of 1 year
- **GlycoProfile II Enzymatic In-Solution Deglycosylation Kit**: Minimum of 1 year
- **GlycoProfile IV Chemical Deglycosylation Kit**: Minimum of 1 year
- **Native Enzymatic Deglycosylation Kit**: Minimum of 1 year
- **Enzymatic Deglycosylation Kit**: Minimum of 1 year

### Sigma.com

Sigma.com
Glycoproteomics Selection Guide — Labeling and Detection, Quantitation

<table>
<thead>
<tr>
<th>Product Number</th>
<th>GlycoProfile 2-AA Labeling Kit</th>
<th>GlycoProfile 2-AB Labeling Kit</th>
<th>GlycoProfile III Fluorescent Glycoprotein Detection Kit</th>
<th>Glycoprotein Detection Kit</th>
<th>Sialic Acid Quantification Kit</th>
<th>Product Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP0530</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP0520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PP0200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GLYCOPRO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SIALICQ</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Sample Size**
- Solutions containing 100 pmol – 50 nmol of purified glycans.
- Protein bands containing 10-500 ng of carbohydrates.
- Solutions containing 1-200 nmols of NANA.

**Sample Scale**
- Each kit is sufficient for labeling up to 36 samples.
- Each kit is sufficient for 10 minigels or 5 large gels.
- For 10 minigels or 5 large gels or membranes of the same sizes.

**Product Description and Applications**
- This kit is optimized for efficient labeling of N-linked, O-linked, and glycosphingolipid (GPI) anchored glycans (anthranilic acid; 2-AA).
- This small fluorophore increases the spectral properties of the glycans, improving the detection of stained glycans by HPAE, HPLC, and ESI-MS. Binding is slow but the glycans are stable, with no degradation analysis.
- Although 2-AB and 2-AB are similar in applications, 2-AB is more sensitive than 2-AA.
- 2-AB and 2-AB are suitable for the same applications, 2-AB is more sensitive than 2-AA, and more suitable for SDS-PAGE.
- The GlycoProfile 2-AB kit is optimized for efficient labeling of N-linked, O-linked, and glycosphingolipid (GPI) anchored glycans (2-AB).
- This small fluorophore increases the spectral properties of the glycans, improving the detection of stained glycans by HPAE, HPLC, and ESI-MS. Binding is slow but the glycans are stable, with no degradation analysis.
- Although 2-AB and 2-AB are suitable for the same applications, 2-AB is more sensitive than 2-AA.

**Features and Benefits**
- Suitable for downstream glycan analysis by HPAE, HPLC, and ESI-MS.
- More sensitive than 2-AB and more suitable for labeling glycoproteins in SDS-PAGE.
- Suitable for downstream glycan analysis by HPAE, HPLC, and ESI-MS.
- Superior selectivity enables more accurate detection of glycoproteins.
- Excellent sensitivity allows detection of 10-500 ng of carbohydrate.
- Convenient and reliable detection of glycoproteins.
- High sensitivity detects as little as 25-100 ng of carbohydrate.
- Rapid and accurate method for total sialic acid content.

**Components**
- 2-AA (Anthranilic Acid), 2 x 6 mg (A6728)
- DMSO (Dimethyl sulfoxide), 2 x 350 ml (D4942)
- Acetic acid, Glacial, 2 x 200 ml (A9353)
- Reductant (Sodium cyanoborohydride), 2 x 6 mg (R5153)
- ProteoProfile PITM Markar, 100 ml (P1479, also available separately)
- Oxidation Reagent, 10x periodic acid solution in water, 250 ml (O2014)
- Glycoprotein Staining Reagent, 100× dianil (hydrazide dye concentrate in acetic acid, 10 ml (G8418))
- Staining Buffer, 2 x 500 ml (W2014)
- Oxidation Reagent (Periodic Acid, neohexose to 1000 mol solution (O2518))
- Reduction Reagent (Sodium metabisulfite, 10X)
- Schiff’s Reagent, Fuchsin-Buffe Reagent, —
- Peroxidase from Horseradish (P2075)
- β-N-Acetylgalactosaminidase, 25 ml (A2680)
- α-Neuraminidase, (O2014)
- α-Neuraminidase (Sialase A), 25 ml (W8271)
- Lacto Defensinase, 25 ml (S8948)
- β-N-Acetylgalactosaminidase, 25 ml (A2674)
- Peroxidase, Bovine, 0.5 mg (P4010)
- β-N-Acetylgalactosaminidase (NANA), 0.018 ml, 200 ml (A5774)
- Thi-HCl, 1,0L, pH 7.5, 1 ml (T0249)
- Staining Buffer, 150 ml, Sodium phosphate, pH 5.0, 200 ml (S718)

**Storage Temperature**
- Room temperature
- Room temperature
- 2-8 °C
- 2-8 °C
- 2-8 °C

**Shelf Life of Unused Product**
- Minimum of 1 year
- Minimum of 1 year
- Minimum of 1 year
- Minimum of 1 year
- Minimum of 1 year

**Sample Scale**
- 10 ml
- 10 ml
- 10 ml
- 10 ml
- 10 ml

**Recommended Sample Size**
- Solutions containing 100 pmol – 50 nmol of purified glycans.
- Protein bands containing 10-500 ng of carbohydrates.
- Proteins bands containing 2-100 ng of carbohydrates.
- Solutions containing 1-200 nmols of NANA.

**Sample Scale**
- Minimum 25 reactions, including control samples
- Each kit is sufficient for labeling up to 36 samples
- For 10 minigels or 5 large gels or membranes of the same sizes

**Components**
- Sialidase Buffer (250 mM Sodium phosphate, pH 5.0, 200 ml (G8418))
- N-Acetylneuraminic Acid (NANA), 0.01M, 200 ml (A0974)
- Fetuin, Bovine, 0.5 mg (F4301)
- L-Lactic Dehydrogenase, 25 ml (N8129)
- N-Acetylneuraminic Acid Aldolase, 25 ml (F4301)

**Features and Benefits**
- Suitable for downstream glycan analysis by HPAE, HPLC, and ESI-MS.
- More sensitive than 2-AB and more suitable for labeling glycoproteins in SDS-PAGE.
- Superior selectivity enables more accurate detection of glycoproteins.
- Excellent sensitivity allows detection of 10-500 ng of carbohydrate.
- Convenient and reliable detection of glycoproteins.
- High sensitivity detects as little as 25-100 ng of carbohydrate.
- Rapid and accurate method for total sialic acid content.
- High sensitivity allows measurement down to 1-200 nmols of sialic acid.

**Components**
- 2-AB (2-Aminobenzamide), 2 x 5 mg (A4478)
- DMSO (Dimethyl sulfoxide), 2 x 350 ml (D4942)
- Acetic acid, Glacial, 2 x 200 ml (A9353)
- Reductant (Sodium cyanoborohydride), 2 x 6 mg (R5153)
- ProteoProfile PITM Markar, 100 ml (P1479, also available separately)
- Oxidation Reagent, 10x periodic acid solution in water, 250 ml (O2014)
- Glycoprotein Staining Reagent, 100× dianil (hydrazide dye concentrate in acetic acid, 10 ml (G8418))
- Staining Buffer, 2 x 500 ml (W2014)
- Oxidation Reagent (Periodic Acid, neohexose to 1000 mol solution (O2518))
- Reduction Reagent (Sodium metabisulfite, 10X)
- Schiff’s Reagent, Fuchsin-Buffe Reagent, —
- Peroxidase from Horseradish (P2075)
- β-N-Acetylgalactosaminidase, 25 ml (A2680)
- α-Neuraminidase, (O2014)
- α-Neuraminidase (Sialase A), 25 ml (W8271)
- Lacto Defensinase, 25 ml (S8948)
- β-N-Acetylgalactosaminidase, 25 ml (A2674)
- Peroxidase, Bovine, 0.5 mg (P4010)
- β-N-Acetylgalactosaminidase (NANA), 0.018 ml, 200 ml (A5774)
- Thi-HCl, 1,0L, pH 7.5, 1 ml (T0249)
- Staining Buffer, 150 ml, Sodium phosphate, pH 5.0, 200 ml (S718)