

Warning:

Wearing gloves is highly recommended when handling the kit contents.

GeBAflex-tube is covered by the WO0190731 patent application assigned to Gene Bio-Application Ltd.

GeBAflex-tubes are autoclaved and are bacterial free.

All kit buffers are filtered, autoclaved and are bacterial free.

***GeBAflex-tubes* membrane is ultra-clean, sulfur and heavy metal free and EDTA treated.**

Gel Extraction and Dialysis Kit

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Applications

- Extraction of proteins, RNA, DNA or oligonucleotides (>20 nt) from polyacrylamide, agrose or any gel matrix in any running buffer.
- Extraction of protein-protein, DNA-protein or RNA-protein complexes.
- Dialysis or buffer exchange of small volumes (50-800 µl).
- Preparation of protein samples for MALD-MS.
- Samples concentration

Kit Contents:

<i>GeBAflex-tubes</i>	15/30 units
Supporting tray (for electro elution protocol)	1 unit
Floating rack (for dialysis protocol)	1 unit
20% aqueous trichloroacetic acid (TCA)	15/21 ml
3M potassium acetate, pH 5.2 (KAc)	2/4 ml
Buffer MS	1.5/3 ml
Information and protocols manual	1

Storage Conditions

GeBAflex-tube kit should be stored in a dry place at room temperature (15-25°C). Under these conditions, *GeBAflex-tube* kit can be stored for up to 12 months without any deterioration in performance and quality. For longer storage time, it is recommended that the *GeBAflex-tube* kit be stored in a cool place (refrigerator), at relative humidity of 35% at least.

Product use Limitations

GeBAflex-tube kit is developed, designed and sold for research purposes only. It is not to be used for human diagnostic purposes or drug production nor for producing any substance intended to be administered to humans unless expressly cleared for that purpose by the Food and Drug Administration in the USA or the appropriate regulatory authorities in the country of use. All due care and attention should be exercised in the handling of materials described in this text.

Quality Control

The performance of *GeBAflex-tube* kit is regularly monitored. *GeBAflex-tube* kit is tested by using it for extraction of Proteins, DNA and RNA fragments of various sizes from either agarose or Polyacrylamide gel. *GeBAflex-tube* kit is tested also for simple dialysis of salts or buffer exchange. The quality of the isolated Protein, DNA and RNA fragments or of the sample after dialysis is checked by several assays commonly used for proteins, nucleic acids and dialysis. Determining the recovery from a specific amount of loaded sample tests the quality of the *GeBAflex-tube* membrane.

GeBAflex-tube

The device combines two modes of action, electro-elution of macromolecules from polyacrylamide or agarose gel and dialysis or buffer exchange of small volume samples (50-800 μ l). This device allows rapid and high performance at either mode and extracts the macromolecules without any contamination. It is ideal for purification of very small quantities of proteins (up to 0.5 μ g), for automated protein sequencing, peptide mapping and amino acid analysis.

Yield of Molecule Recovery

DNA or RNA from agarose gel	90%
DNA or RNA from polyacrylamide gel	90%
Protein from SDS-PAGE	70%

Specifications

Membrane cut-off	3500 or 6000-8000 MWCO
Tube volume capacity	800 μ l
Minimum amount of protein at the start of extraction	0.5 μ g
Maximum size of the gel slice that can be inserted into the tube	1 cm x 0.5 cm
Volume of sample for dialysis	50-800 μ l
Membrane	Ultra-clean. Sulfur and heavy metal free. EDTA treated

Protein Extraction from Polyacrylamide Gel with *GeBAflex-tube*

IMPORTANT: Fixation of proteins before electro elution (e.g. fixation with methanol, acetic acid, etc) is not recommended; fixation greatly reduces extraction yield. A sensitive protein staining solution, **SeeBand (from Gene Bio-Application Ltd, see Ordering Information page 24)**, is good staining reagents as it permanently stain the gel without undue fixing of the protein.

Procedure

1. Fill the *GeBAflex-tube* with 0.8 ml of dH₂O; incubate for at least 5 min. empty the tube.

IMPORTANT: Check carefully that no dH₂O is leaking from the tube. Absorbent of water, by the dry membrane, cause to the decrease in water level.

2. After staining the gel (with SeeBand protein staining solution), excise the gel slice containing the protein fragment with a clean, sharp scalpel.

Minimize the size of the gel slice by removing extra gel.

3. Transfer the gel slice to a *GeBAflex-tube*. Fill the tube with protein-running buffer (0.7-0.8 µl). Close the tube gently.

Avoid air bubbles in the tube. The maximum size of gel slice per *GeBAflex-tube* is 1 cm x 0.5 cm; **don't fill the tube with several gel slices**, for large gel slices use more than one tube.

4. Place the *GeBAflex-tube* in the provided supporting tray (see Figure 1).

The supporting tray can hold 1-4 *GeBAflex-tube(s)*.

IMPORTANT: The arrow on the cap is pointing face up. The two membranes of the *GeBAflex-tube* must be in perpendicular to

the electric field to permit the electric current to pass through the tube.



Figure 1: Insertion of the *GeBAflex-tube* in the provided supporting tray. The arrow on the cap is pointing upwards.

- 5. Place the supporting tray containing the *GeBAflex-tube(s)* in a horizontal electrophoresis tank containing protein running buffer (see Figure 2).**

IMPORTANT: Immerse **fully** the *GeBAflex-tube(s)* with the tray in the buffer.

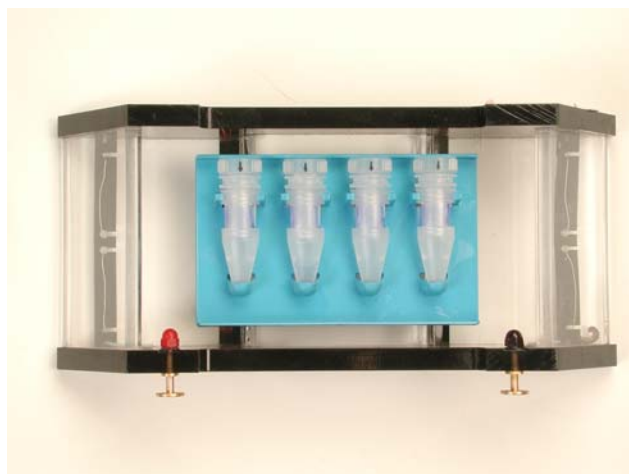


Figure 2: supporting tray containing four the *GeBAflex-tubes* in a horizontal electrophoresis tank. The arrow on the cap is pointing face up and the two membranes of the *GeBAflex-tube* are in perpendicular to the electric field.

6. Pass electric current (usually at 100 volt) until the protein exits from the gel slice.

Electro-elution time is to be adjusted for each individual sample. It takes at least 85 min for BSA protein to be electro-eluted from a 10% SDS-PAGE slice (see Table 1, page 9).

7. Reverse the polarity of the electric current for 120 seconds.

This step will release the protein from the membrane.

8. Open the *GeBAflex-tube* gently, pipetting the protein-containing solution up and down carefully (at least 5 times) and transfer the solution to a clean 1.5 ml microcentrifuge tube.

Do the pipetting on the inner side of the membrane.

9. Centrifuge the microcentrifuge tube for 1 min at maximum speed.

This step will remove gel residues.

10. Transfer the protein-containing solution to a clean 1.5-ml microcentrifuge tube.

Notes:

- i. Use the extracted protein directly.
- ii. Concentrate the extracted protein by standard concentration methods.
- iii. Concentrate the extracted protein by ProteoCon*N* or ProteoCon*D* kits (see Ordering Information, page 24).
- iv. Precipitate the extracted protein by standard precipitation protocols (see page 10).
- v. Dialyze directly the extracted protein by a *GeBAflex-tube* (see page 14).

Elution Time Table

The elution time depends on the size of the protein molecule to be eluted, the applied voltage, the size of gel slice, the ratio of the polyacrylamide:bisacrylamide and the percentage of the polyacrylamide gel. **Electro-elution time at the elution step was to be adjusted for each individual sample.**

Table 1: Minimum time needed to extract different-sized proteins from 10% SDS-polyacrylamide gel (29:1 polyacrylamide:bisacrylamide) at 100 V.

Protein (kDa)	Time (min)	Protein (kDa)	Time (min)
14	35-45	50	75-85
19-26	45-55	66	85-95
29	55-65	81	105-115
40	60-70	116	120-130
45	65-75	128	140-150

Protein precipitation protocols

Trichloroacetic acid (TCA) precipitation procedure

1. Add equal volume of 20% TCA to the microcentrifuge tube containing the extracted protein solution and mix properly.

For example, add 700 μ l of 20% TCA to a 700 μ l sample.

2. Incubate 1 hr at 4°C.
3. Spin in a microcentrifuge at 4°C for 30 min at 14,000 RPM.
4. Discard supernatant carefully.
5. Add 500 μ l cold acetone.
6. Incubate at -20°C for 30 min and centrifuge the sample at 4°C for 30 min at 14,000 RPM.

To increase protein precipitation yield incubate the samples over night at -20°C .

7. Discard supernatant and air-dry the pellet.
8. Resuspend the pellet using 0.1M NaOH or dH_2O (**use at least 20 μl to perform resuspension**). If dH_2O is used for resuspension, incubate the sample for 5 min in 60°C , resuspend the sample and incubate 5 min more at 60°C .

MS precipitation procedure

1. Add 1:10 by volume of MS buffer to the protein containing solution and mix properly.

For example, add 70 μl of MS buffer to a 700 μl sample.

2. Incubate for 15 min at room temperature.
3. Add 1: 2 by volume of 20% TCA and mix properly.

For example, add 385 μl of 20% TCA to a 770 μl sample.

4. Incubate for 1 hour at 4°C .
5. Centrifuge the sample at 4°C for 30 min at 14,000 RPM.
6. Carefully descent the supernatant without disturbing the pellet.
7. Add 500 μl of ice-cold acetone.
8. Incubate at -20°C for 30 min and centrifuge the sample at 4°C for 30 min at 14,000 RPM.

To increase protein precipitation yield incubate the samples over night at -20°C .

9. Carefully descent the supernatant without disturbing the pellet. Air-dry the pellet.
10. Resuspend the pellet in a suitable buffer solution or 0.1M NaOH (**use at least 20 μl to perform resuspension**).

Protein Extraction from Polyacrylamide Gel compatible with Matrix-assisted Laser Desorption/Ionization Mass Spectrometry (MALDI-MS) by *GeBAflex-tube*

Introduction

Sodium dodecylsulfate-polyacrylamide gel electrophoresis (SDS-PAGE) is a widely used technique for the separation and molecular weight estimation of individual proteins. However, the accuracy of this molecular weight determination is often inadequate for protein characterization. More recently Matrix-assisted Laser Desorption/Ionization Mass Spectrometry (MALDI-TOFMS) has found widespread use for the determination of molecular mass of intact proteins isolated from gels. The isolation of proteins from gels with the newly developed *GeBAflex-tube* electro-elution system has over 80% recovery yields. This combination of SDS-PAGE, *GeBAflex-tube* electro-elution system and MALDI-TOFMS is attractive. It provides a much more accurate determination of protein molecular weight. Moreover, even difficult proteins to analyze such as integral membrane proteins (hydrophobic) or high molecular mass proteins can be analyzed. This unique method provides a powerful means for characterizing endogenous proteins of wide molecular weight range separated by SDS-PAGE.

The combination of the three methods provides significantly improved protein yield and SDS free samples. The end result is a MALDI-MS analysis with greater sensitivity. The *GeBAflex-tube* tool provides high protein yield recovery, and the MS buffer contained in the *GeBAflex-tube* kit thoroughly removes the SDS.

Procedure

- 1. Fill the *GeBAflex-tube* with 0.8 ml of dH₂O; incubate for at least 5 min. Empty the tube.**

IMPORTANT: Check carefully that no dH₂O is leaking from the tube. Absorbent of water, by the dry membrane, cause to the decrease in water level.

- 2. After staining the gel (with SeeBand, see Orderings Information page 24), excise the gel slice containing the protein fragment with a clean, sharp scalpel.**

Minimize the size of the gel slice by removing extra gel.

Using the SeeBand staining solution will result in the best recovery yield of proteins from the gel.

3. **Transfer the gel slice to a *GeBAflex-tube*. Fill the tube (0.7-0.8 μ l) with protein running buffer containing 250 mM Tricine pH 8.5, 0.025% SDS and 25 mM Tris-Base. Close the tube gently.**

Avoid air bubbles in the tube. The maximum size of gel slice per *GeBAflex-tube* is 1 cm x 0.5 cm; **don't fill the tube with several gel slices**; for large gel slices use more than one tube.

4. **Place the *GeBAflex-tube* in the provided support tray (see Figure 1, page 7).**

The support tray can hold 1-4 *GeBAflex-tube(s)*.

5. **Place the support tray containing the *GeBAflex-tube(s)* in a horizontal electrophoresis tank filled with protein-running buffer (250 mM Tricine pH 8.5, 0.025% SDS and 25 mM Tris-Base) (see Figure 2 page 8).**

IMPORTANT: Immerse **fully** the *GeBAflex-tube(s)* with the tray in the buffer.

6. **Pass electric current at 150 volt until the protein exits from the gel slice.**

The electro-elution time is to be adjusted for each individual sample. It takes at least 2 hours for BSA protein to be electro-eluted from a 10% SDS-PAGE gel slice.

Increase electro elution time in **Table 1** page 9 by 30% .

7. **Reverse the polarity of the electric current for 120 seconds.**

This step will remove the protein from the membrane.

8. **Open the *GeBAflex-tube* gently, pipetting the protein-containing solution up and down carefully (at least 5 times) and transfer the solution to a clean 1.5 ml microcentrifuge tube.**

Do the pipetting on the inner side of the membrane.

9. **Centrifuge the microcentrifuge tube for 1 min at maximum speed.**

This step will remove gel residues.

10. **Transfer the protein-containing solution to a clean 1.5-ml microcentrifuge tube.**

For notes: See page 9.

Precipitation protocol of protein for analysis by MALDI-MS

1. Add 1:10 by volume of MS buffer to the protein containing solution and mix properly.

For example, add 70 μ l of MS buffer to a 700 μ l sample.

2. Incubate for 15 min at room temperature.
3. Add 1: **5** by volume of **50% TCA (not provided in the kit)** and mix properly.

For example, add 154 μ l of 50% TCA to a 770 μ l sample.

4. Incubate for 1 hour at 4°C.
5. Centrifuge the sample at 4°C for 30 min at 14,000 RPM.
6. Carefully descent the supernatant without disturbing the pellet.
7. Add 500 μ l of ice-cold acetone.
8. Incubate at -20°C for 30 min and centrifuge the sample at 4°C for 30 min at 14,000 RPM.

To increase protein precipitation yield incubate the samples over night at -20°C.

9. Carefully descent the supernatant without disturbing the pellet. Air-dry the pellet.
10. For mass spectrometric analysis resuspend the pellet in appropriate solution compatible with MALDI-MS (protein characteristic is important for determination the appropriate solution) followed by essential dilution step according to the protocols compatible with MALDI-MS. Use at least 20 μ l to perform resuspension.

Dialysis with the *GeBAflex-tube*

Procedure

1. Fill the *GeBAflex-tube* with 0.8 ml of dH₂O; incubate for at least 5 min. empty the tube.

IMPORTANT: Check carefully that there is no dH₂O leaking from the tube. Absorbent of water, by the dry membrane, cause to the decrease in water level.

2. Load sample into the *GeBAflex-tube*. Close the tube.

Sample volume should be in the range of 50-800µl. If small volume is used, load the sample close to the inner membrane.

3. Place the loaded *GeBAflex-tube* in the supplied floating rack in a stirred beaker containing large volume (usually 100 to 1000-fold that of the sample) of the desired buffer.

The floating rack can hold 1-4 *GeBAflex-tube(s)*.

Adjust the stir bar speed. Allow at least 30 min for each 0.1 ml of sample. Low-molecular weight salts and buffers (e.g., Tris•Cl and KPO₄) equilibrate within 3 hours. Equilibration times for viscous samples will be longer.

IMPORTANT: The user must determine exact equilibration times for the dialysis.

4. Change the dialysis buffer as necessary.
5. Pipet out the sample carefully from the *GeBAflex-tube* to a clean microcentrifuge tube.

If sample volume increased during dialysis, let your sample evaporate on the bench top (using a fan to increase airflow across the membrane will speed up the process), making sure to check every 10 min or less to prevent evaporation to dryness.

Sample Concentration by evaporation with *GeBAflex-tube*

GeBAflex-tubes are ideally suited for sample concentration via evaporation because of their dual membranes and large surface area. Dialysis and concentration in the same device reduce protein loss. Unlike closed-system centrifuge-type devices, sample concentration can be easily monitored in the *GeBAflex-tubes*.

1. **Place a sample in the *GeBAflex-tube* or use already dialyzed sample and place it on microtube rack stand.**
2. **Let your sample evaporate on the bench top (using a fan to increase airflow across the membrane will speed up the process), making sure to check every 10 min or less to prevent evaporation to dryness. When concentrating by evaporation the water from your sample, the small molecule (buffer salts, reducing agents, etc.) will also be concentrated because no diffusion occurs.**

IMPORTANT: When evaporating water from your sample, small molecules (buffer salts, reducing agents, etc.) will also be concentrated.

DNA and RNA Extraction from Gel with the *GeBAflex-tube*

This procedure is designed to extract DNA or RNA from polyacrylamide or agarose gels.

Procedure

1. **Fill the *GeBAflex-tube* with 0.8 ml of dH₂O, incubate for at least 5 min. Empty the tube.**

IMPORTANT: Check carefully that no dH₂O is leaking from the tube. Absorbent of water, by the dry membrane, cause to the decrease in water level.

2. **Excise the slice of gel containing the desirable DNA or RNA fragment with a clean, sharp scalpel.**

Minimize the size of the gel slice by removing extra gel.

3. **Transfer the gel slice to a *GeBAflex-tube*. Fill the tube with dH₂O (0.7-0.8 ml). Close the tube gently.**

Avoid air bubbles in the tube. The maximum size of gel slice per *GeBAflex-tube* is 1 cm x 0.5 cm; **don't fill the tube with several gel slices**, for large gel slices use more than one tube.

4. **Place the *GeBAflex-tube* in the provided tray (see Figure 1 page 7).**

The supporting tray can comprise 1-4 *GeBAflex-tube(s)*.

IMPORTANT: The arrow on the cap is pointing face up. The two membranes of the *GeBAflex-tube* must be in parallel perpendicular to the electric field to permit the electric current to pass through the tube.

5. **Place the supporting tray containing the *GeBAflex-tube(s)* in a horizontal electrophoresis tank containing running buffer (see Figure 2 page 8).**

IMPORTANT: Immerse **fully** the *GeBAflex-tube(s)* with the tray in the buffer.

The two membranes of the *GeBAflex-tube* must be in perpendicular to the electric field to permit the electric current to pass through the tube.

6. **Pass electric current (usually at 80-150 volt) until the nucleic acid exits from the gel slice (see Tables 2 and 3 page 18).**

Optional: Follow the DNA or RNA eluted out of the gel with a hand-held UV lamp or table.

IMPORTANT: The electro-elution time needs to be adjusted for each individual sample.

7. **Reverse the polarity of the current for 120 seconds.**

This step will release the nucleic acid from the membrane.

8. **Open the *GeBAflex-tube* gently, pipetting the solution up and down carefully (at least 5 times) and transfer the solution to a clean 1.5 ml microcentrifuge tube.**

Do the pipetting on the inner side of the membrane.

9. Centrifuge the microcentrifuge tube for 1 min at maximum speed.

This step will remove gel residues.

10. Transfer the nucleic acid containing solution to a clean 1.5-ml microcentrifuge tube.

Note: Concentrate the extracted nucleic acid by standard concentration methods; for nucleic acid precipitation see page 19.

Elution Time Tables

In this method the elution time depends on the size of the nucleic acid fragment, the concentration of the gel, the size of the gel slice, the ratio of the polyacrylamide:bisacrylamide and the applied voltage.

IMPORTANT: The electro-elution time at the elution step needs to be adjusted for each individual sample.

Table 2: Minimum time needed to extract various DNA or RNA fragments from native or denatured 4% polyacrylamide gel (29:1 polyacrylamide:bisacrylamide) at 100-150 volt.

DNA	
Fragment size (bp)	Elution time (Min)
100	10-20
300	15-25
500	20-30
822	25-35
1044	30-40
2700	45-55

RNA	
Fragment size (nt)	Elution time (Min)
100	15-25
400	25-35
600	35-45
1000	45-55

Table 3: Minimum time needed to extract DNA fragments from 1% agarose gel at 80-110 volt.

Fragment size (bp)	Elution time (Min)
100-200	10-20
700-500	15-20
1000	20-30
4361	25-35
6557	45-55
9416	55-65

23130	70-80
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DNA or RNA precipitation

Procedure

1. Add 0.1 volume of 3M KAc and 0.7-1 volume of isopropanol to the solution. Mix gently by inverting the tube several times.

For example, add 70 μ l of 3M KAc and 500-700 μ l isopropanol to a 700 μ l sample.

Note: addition of carrier (e.g. 20 μ g tRNA or 20 μ g glycogen) to the solution will increase the efficiency of precipitation.

2. Incubate at -20°C for 10 min.
3. Centrifuge the sample at 4°C for 30 min at 14,000 RPM.
4. Carefully discard the supernatant without disturbing the pellet.
5. Wash the pellet with 0.5 ml of cooled 70% ethanol.
6. Centrifuge at 4°C for 5 min at 14,000 RPM.

Centrifuge the tube in the same orientation as previously to recover the DNA or RNA in a compact pellet.

7. Air-dry the pellet for 5-20 min.

Do not overdry the pellet (e.g., by using a vacuum evaporator), as this will make the DNA, especially if it is of high molecular weight, difficult to redissolve.

8. Redissolve the DNA or RNA in a suitable buffer.

Use a buffer with pH \geq 8.0 for redissolving, as DNA does not dissolve readily in acidic buffers.

Troubleshooting Guide

	Cause	Comments and Suggestion
Low yield	Insufficient elution time	Increase elution time. Increase applied voltage.
	Current polarity was not reversed	Reverse the polarity of the current for 60 second.
	Incomplete emptying of the tube from the macromolecules-containing solution	Make sure to empty all the macromolecules containing solution at the end of elution.
	Ineffective precipitation	Use suitable precipitation procedures.
	Tube not fully immersed in the buffer of the electrophoresis tank	Fully immerse the tube in the buffer of the electrophoresis tank, using the supporting tray.
	Gel slice not fully immersed in the buffer inside the tube	Fully immerse the gel slice in buffer inside the tube
	More than one gel slice into the tube	Don't fill the tube with several gel slices, for large gel slices use more than one tube
	The electric current don't pass through the tube	The two membranes of the <i>GeBAflex-tube</i> must be parallel to the electric field
Long elution time	Low applied voltage	Increase applied voltage.
	Gel slice is not fully immersed in the buffer inside the tube	Fully immerse the gel slice in buffer inside the tube

	Cause	Comments and Suggestion
	Tube not fully immersed in the buffer of the electrophoresis tank	Fully immerse the tube in the buffer of the electrophoresis tank, using the supporting tray.
Macromolecules containing solution reduced after elution	Membrane not wetted before elution	Wet the membrane for 5 min with dH ₂ O before elution
	Pinhole in the membrane, due to careless handling of the tube	Change tube
Presence of air bubbles in the tube	Insufficient dH ₂ O or running buffer inside the tube	After inserting the gel slice in the tube, fill the tube to the top of the electro-elution windows.

Ordering Information

Product	Contents	Cat. No.
GeBAflex-tube kits		
<i>GeBAflex-tube Midi</i> (15)	15 <i>GeBAflex-tube</i> , 3500 cut-off, buffers, supporting tray, floating rack	GeBA-T011
<i>GeBAflex-tube Midi</i> (15)	15 <i>GeBAflex-tube</i> of 6000-8000 cut-off, Buffers, supporting tray, floating rack	GeBA-T021
<i>GeBAflex-tube Midi</i> (30)	30 <i>GeBAflex-tube</i> of 3500 cut-off, buffers, supporting tray, floating rack	GeBA-T012
<i>GeBAflex-tube Midi</i> (30)	30 <i>GeBAflex-tube</i> of 6000-8000 cut-off, buffers, supporting tray, floating rack	GeBA-T022
<i>GeBAflex-tube Maxi</i> (5)	5 <i>GeBAflex-tube</i> of 3500 cut-off, buffers, supporting tray, floating rack	GeBA-T030
<i>GeBAflex-tube Maxi</i> (5)	5 <i>GeBAflex-tube</i> of 6000-8000 cut-off, buffers, supporting tray, floating rack	GeBA-T040
<i>GeBAflex-tube Maxi</i> (5)	5 <i>GeBAflex-tube</i> of 12000-14000 cut-off, buffers, supporting tray, floating rack	GeBA-T050
<i>GeBAflex-tube Midi Sample Kit</i> (2)	2 <i>GeBAflex-tube</i> of 3500 cut-off, buffers, supporting tray, floating rack	GeBA-T013
<i>GeBAflex-tube Maxi Sample Kit</i> (2)	2 <i>GeBAflex-tube</i> of 3500 cut-off, buffers, supporting tray, floating rack	GeBA-T033
<i>SeeBand</i> protein staining solution	500 ml solution and handbook	SB010
<i>SeeBand Forte</i> protein staining solution	500 ml solution and handbook	SB020
<i>ProteoConN</i> kit for concentration of protein	10 concentration column, beads, buffers and handbook	PN010
<i>ProteoConD</i> kit for concentration of protein	10 concentration column, beads, buffers and handbook	PN010
Accessories		

TCA	21 ml trichloroacetic acid (20%)	GeBA-T101
KAc	3 ml potassium acetate (3M, pH 5.2)	GeBA-T102
Buffer MS	3 ml	GeBA-T103
Supporting tray	Supporting tray for 1-4 <i>GeBAflex-tube(s)</i>	GeBA-T001
Floating rack	Floating rack for 1-4 <i>GeBAflex-tube(s)</i>	GeBA-T002