ZYMO RESEARCH

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INSTRUCTION MANUAL

Select-a-Size DNA Clean & Concentrator MagBead Kit

Catalog No. **D4084 & D4085**

Highlights

- **Tunable:** Size selection can be tuned from 100 bp to 1000 bp with left, right, or double size selection
- **Ultra-Pure:** 10 µl elutions are ready for next generation sequencing, etc.
- **Automation Ready:** Scripts and automation support readily available.

Contents

ZYMO RESEARCH CORP.

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Satisfaction of all Zymo Research products is guaranteed. If you are dissatisfied with this product, please call 1-888-882-9682.

Notes:

Plates and consumables, sold separately:
- 96-Well **Collection Plate** (C2002; ⩽ 1.2 ml/well capacity)
- **96-Well Block** (P1001; ⩽ 2 ml/well capacity)
- **Elution Plate** (C2003)
- **Cover Foil** (C2007)

This product is for research use only and should only be used by trained professionals. It is not for use in diagnostic procedures. Some reagents included with this kit are irritants. Wear protective gloves and eye protection. Follow the safety guidelines and rules enacted by your research institution or facility.

Product Contents:

Select-a-Size DNA Clean & Concentrator MagBead Kit (Kit Size)	D4084 (10 ml)	D4085 (50 ml)	Storage Temperature
Select-a-Size MagBead Concentrate	0.3 ml	1.5 ml	4 – 8 °C
Select-a-Size MagBead Buffer	10 ml	50 ml	4 – 8 °C
DNA Wash Buffer[1]	24 ml	3x 24 ml	Room Temp.
DNA Elution Buffer	16 ml	50 ml	Room Temp.
Instruction Manual	1	1	-

Integrity of kit components is guaranteed for up to one year from date of purchase. Reagents are routinely tested on a lot-to-lot basis to ensure they provide maximal performance and reliability.
All components available for purchase separately. For ordering information, refer to page 12.
[1] Ethanol must be added prior to use as indicated on **DNA Wash Buffer** label.

Specifications:

- **DNA Purity:** Eluted DNA is of high quality and is well suited for ligations, restriction digestions, library preparation cleanup, and next generation sequencing applications.
- **Recovery Volume:** ≥ 25 µl of DNA Elution Buffer for 96 well plates
  ≥ 10 µl of DNA Elution Buffer for manual preps performed using microcentrifuge tubes
- **Required Equipment:** Magnetic Separator
- **Processing Time:** ≥ 10 mins
- **Principle of Technology:** The Select-a-Size DNA Clean & Concentrator MagBead Kit works on the principle of selective binding, wherein the size of the nucleic acid and the ratio of the magnetic beads controls what is retained on the beads and what remains in the supernatant. Either fraction (beads or supernatant) can be further purified which is an enabling and flexible feature of this technology. As the ratio of MagBeads to sample increases, proportionally lower molecular weight DNA (smaller fragments) are retained. Therefore, the size selection is controlled by increasing or decreasing quantities of magbeads. Samples can be size selected to remove smaller fragments with Left-Sided Size Selection (Figure 1), larger fragments with Right-Sided Size Selection (Figure 2), or both large and small fragments in Double-Sided Size Selection. Listed within this protocol are the most common cutoffs and starting sample volumes. Cutoffs not included within this protocol can be determined by titrating between points.

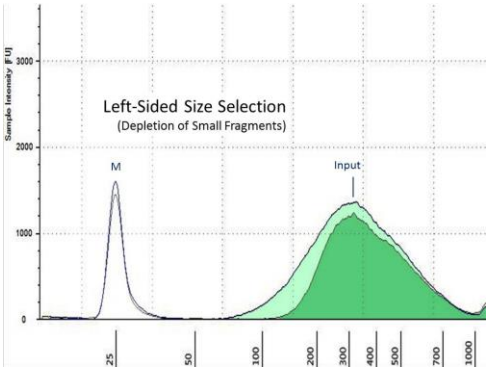


Figure 1

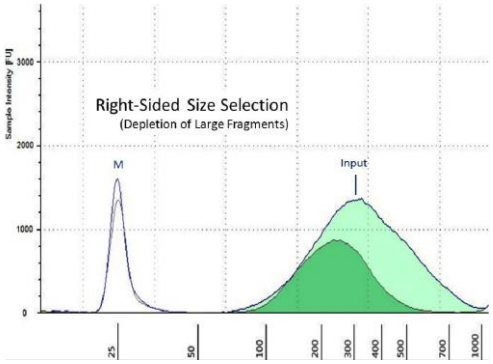
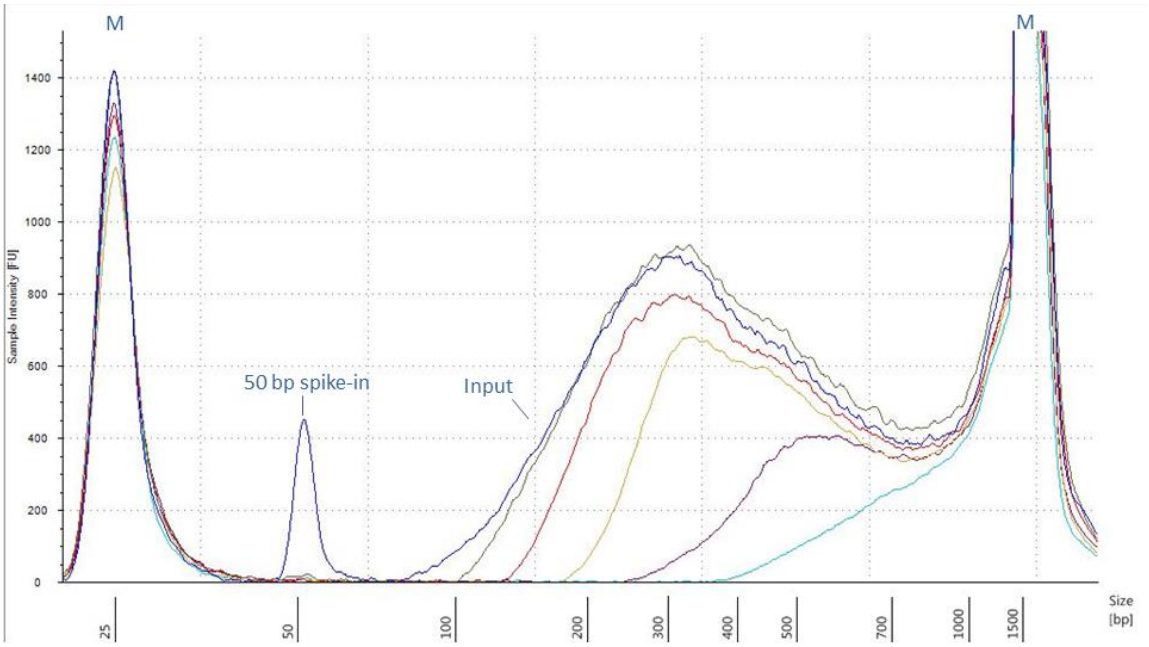


Figure 2

Description:

The **Select-a-Size DNA Clean & Concentrator Magbead Kit** provides the fastest and easiest method to purify specific ranges of DNA fragments from PCR, endonuclease digestions, ligations, library preparations, adapter removal, etc. This simple workflow allows for specific cutoffs that can be modified to suit reaction clean-up, left-sided, right-sided or even double-sided size selection. The **Select-a-Size MagBead Buffer** selectively binds fragments based on the volume added relative to the sample. Simply choose a desired cutoff to bind the target of interest onto the beads and remove species outside of this range. The desired DNA is easily eluted from the beads following a rapid wash regimen.

Choose from one of the pre-determined cutoffs or fine tune the protocol for even more specific selections between these points. Size selections can be performed in as little as 10 minutes to yield high-quality DNA which is suitable for highly sensitive applications including Next Generation Sequencing, and any other sensitive downstream applications. The protocol can be performed manually or using an automated platform for high throughput processing.



Select-a-Size DNA Clean & Concentrator MagBead Kit allows for left-sided size selection at ≥ 400 bp, ≥ 300 bp, ≥ 200 bp, ≥ 150 bp and ≥ 100 bp. DNA was size selected according to the Select-a-Size DNA Clean & Concentrator MagBead protocol and the results were analyzed by Agilent 2200TapeStation. 1 µg of sonicated salmon sperm DNA in water was used as a standard input to evaluate size selection efficiency and cutoff.

Notes:

[1] For complete resuspension, allow **Select-a-Size MagBead Buffer** to equilibrate to room temperature (15-30°C).

[2] For complete adapter/dimer removal, select a cutoff that is at least 50 bp above the undesired fragment size.

[3] To minimize the effects of pipetting errors, bring sample volume up to 50 µl with **DNA Elution Buffer**

[4] Higher cutoffs are more sensitive to minor changes in pipetting. For low sample volumes, bring up the volume to 50 µl with DNA Elution Buffer.

[5] For maximum recovery, mix samples well and incubate samples for 5 minutes.

[6] Avoid aspirating any beads when removing the supernatant. To best prevent this, leave 2-5 µl of liquid behind.

[7] An optional drying incubation of 3 minutes at room temperature can be performed to ensure all traces of ethanol are removed.

[8] For plates, an elution volume greater than 25 µl may be required in order to guarantee full contact with the magnetic beads.

[9] For microcentrifuge tubes, an elution volume as low as 10 µl can be used to resuspend the beads and obtain a highly concentrated eluate.

Before starting: Add 96 ml of 100% ethanol (104 ml 95% ethanol) to the 24 ml **DNA Wash Buffer** concentrate.

Before starting: Add 300 µl of **Select-a-Size Magbead Concentrate** to the 10 ml **Select-a-Size MagBead Buffer**. Add 1.5 ml of **Select-a-Size MagBead Concentrate** to the 50 ml **Select-a-Size MagBead Buffer**.

Clean-up and Left-Sided Size Selection (Depletion of Small Fragments):

The following procedure should be performed at room temperature (15-30°C).

1. Resuspend the magnetic particles by vigorously shaking the **Select-a-Size MagBead Buffer** until homogenous[1].

2. Choose the desired cutoff from the table below[2]. Based on your sample volume[3], determine the amount of **Select-a-Size MagBead Buffer** required.
   Note: (Sample Volume) x (Ratio) = Volume of Select-a-Size MagBead Buffer

DNA Fragments Retained	Ratio of Select-a-Size MagBead Buffer	Quick Setup Guide		
		20 µl sample volume[4]	50 µl sample volume	100 µl sample volume
≥ 400 bp	0.50x	-	25 µl	50 µl
≥ 300 bp	0.58x	-	29 µl	58 µl
≥ 200 bp	0.80x	16 µl	40 µl	80 µl
≥ 150 bp	1.20x	24 µl	60 µl	120 µl
≥ 100 bp	1.80x	36 µl	90 µl	180 µl

3. Add the necessary volume of **Select-a-Size MagBead Buffer** to the sample. Mix thoroughly by pipetting or vortexing until homogenous. Incubate for 2 minutes[5].

4. Place the sample on a magnetic rack or plate and incubate for 3-10 minutes, or until the magnetic beads have fully separated from solution.

5. Once the beads have been cleared from solution, discard the supernatant[6]

6. While the beads are still on the magnetic rack, add 200 µl of **DNA Wash Buffer**. Remove and discard the supernatant. Repeat this step.

7. While the beads are still on the magnetic rack, aspirate out any residual DNA Wash Buffer. Remove samples from the magnetic rack[7].

8. Add ≥ 25 µl **DNA Elution Buffer** to the beads[8, 9] and mix thoroughly by pipetting up and down or vortexing until homogenous. Incubate at room temperature for 2 minutes.

9. Place the sample on a magnetic rack for 1-2 minutes to separate the magnetic beads from eluate.

10. Transfer supernatant to a clean microcentrifuge tube or 96-well plate. The ultra-pure DNA is now ready for use.

Before starting: Add 96 ml of 100% ethanol (104 ml 95% ethanol) to the 24 ml **DNA Wash Buffer** concentrate.

Before starting: Add 300 µl of **Select-a-Size Magbead Concentrate** to the 10 ml **Select-a-Size MagBead Buffer**. Add 1.5 ml of **Select-a-Size MagBead Concentrate** to the 50 ml **Select-a-Size MagBead Buffer**.

Right-Sided Size Selection (Depletion of Large Fragments):

The following procedure should be performed at room temperature (15-30°C).

1. Resuspend the magnetic particles by vigorously shaking the **Select-a-Size MagBead Buffer** until homogenous[1].

2. Bring the DNA sample volume up to 50 µl with **DNA Elution Buffer**.

   Note: For a 20 µl sample, add 30 µl of **DNA Elution Buffer** to the sample for a total of 50 µl.

3. Choose the desired cutoff from table below. Add the necessary volume of **Select-a-Size MagBead Buffer** to the sample based on the desired ratio. Mix thoroughly by pipetting or vortexing until homogenous. Incubate this mixture for 2 minutes[3].

   Note: (Sample Volume) x (Ratio) = Volume of Select-a-Size MagBead Buffer

   Example: To retain fragments smaller than 500 bp with a 50 µl starting sample, add 30.0 µl

DNA Fragments Retained	First Ratio of Select-a-Size MagBead Buffer	First Volume of MagBead Buffer for 50 µl starting sample
A) ≤ 1000 bp	0.50x	25.0 µl
B) ≤ 800 bp	0.53x	26.5 µl
C) ≤ 500 bp	0.60x	30.0 µl
D) ≤ 400 bp	0.70x	35.0 µl
E) ≤ 300 bp	0.85x	42.5 µl
F) ≤ 200 bp	1.20x	60.0 µl

4. Place the sample on a magnetic rack or plate and incubate for 3-10 minutes, or until the magnetic beads have fully separated from solution.

5. Once the beads have been cleared from solution, **transfer the supernatant into a new tube**[4]. Discard the beads.

6. Refer to the table on the next page and add the necessary volume of **Select-a-Size MagBead Buffer** to the supernatant from step 5 based on the cutoff chosen in step 3. Mix thoroughly by pipetting or vortexing until homogenous. Incubate this mixture for 2 minutes.

   Note: (Sample Volume) x (Ratio) = Volume of Select-a-Size MagBead Buffer

   Example: To retain fragments smaller than 500 bp with a 50 µl starting sample, add 60.0 µl to the supernatant from step 5

Notes:

[1] For complete resuspension, allow **Select-a-Size MagBead Buffer** to equilibrate to room temperature (15-30°C).

[2] For complete adapter/dimer removal, select a cutoff that is at least 50 bp below the undesired fragment size.

[3] For maximum recovery, mix samples well and incubate samples for 5 minutes.

[4] Avoid aspirating any beads when removing the supernatant. To best prevent this, leave 2-5 µl of liquid behind.

DNA Fragments Retained	Second Ratio of Select-a-Size MagBead Buffer	Second Volume of MagBead Buffer for 50 µl starting sample
A) ≤ 1000 bp	1.30x	65.0 µl
B) ≤ 800 bp	1.27x	63.5 µl
C) ≤ 500 bp	1.20x	60.0 µl
D) ≤ 400 bp	1.10x	55.0 µl
E) ≤ 300 bp	0.95x	47.5 µl
F) ≤ 200 bp	0.60x	30.0 µl

7. Place the sample on a magnetic rack or plate and incubate for 3-10 minutes, or until the magnetic beads have separated from solution.

8. Once the beads have cleared from solution, discard the supernatant[4].

9. While the beads are still on the magnetic rack, add 200 µl of **DNA Wash Buffer**. Remove and discard the supernatant. Repeat this step.

10. While the beads are still on the magnetic rack, aspirate out any residual DNA Wash Buffer. Remove samples from the magnetic rack[5].

11. Add ≥ 25 µl **DNA Elution Buffer** to the beads[6, 7] and mix thoroughly by pipetting up and down or vortexing until homogenous. Incubate at room temperature for 2 minutes.

12. Place the sample on a magnetic rack and incubate for1-2 minutes, or until the magnetic beads have separated from solution.

13. Transfer supernatant to the final tube or plate. The ultra-pure DNA is now ready for use.

Notes:

[5] An optional drying incubation of 3 minutes at room temperature can be performed to ensure all traces of ethanol are removed.

[6] For plates, an elution volume greater than 25 µl may be required in order to guarantee full contact with the magnetic beads.

[7] For microcentrifuge tubes, an elution volume as low as 10 µl can be used to resuspend the beads and obtain a highly concentrated eluate.

Before starting: Add 96 ml of 100% ethanol (104 ml 95% ethanol) to the 24 ml **DNA Wash Buffer** concentrate.

Before starting: Add 300 µl of **Select-a-Size Magbead Concentrate** to the 10 ml **Select-a-Size MagBead Buffer**. Add 1.5 ml of **Select-a-Size MagBead Concentrate** to the 50 ml **Select-a-Size MagBead Buffer**.

Appendix A: Double-Sided Size Selection

1. Resuspend the magnetic particles by vigorously shaking the **Select-a-Size MagBead Buffer** until homogenous[1].

2. If the DNA sample volume ≤ 50 µl, bring up the volume with **DNA Elution Buffer**.

   Example: For a 20 µl sample, add 30 µl of **DNA Elution Buffer** to the sample for a total of 50 µl.

3. Choose the desired high molecular weight cutoff from the table below. Add the **Select-a-Size MagBead Buffer** to your sample based on the chosen ratio and mix thoroughly by pipetting or vortexing until homogenous. Incubate this mixture for 2 minutes[2]. The larger unwanted fragments will bind onto the MagBeads.

   Note: (Sample Volume) x (Ratio) = Volume of Select-a-Size MagBead Buffer

   Example: For a size selection between 150-1000 bp with a 50 µl starting sample, add 25.0 µl

DNA Fragments Retained	First Ratio of Select-a-Size MagBead Buffer	First Volume of MagBead Buffer for 50 µl sample
≤ 1000 bp	0.55x	27.5 µl
≤ 800 bp	0.60x	30.0 µl
≤ 500 bp	0.70x	35.0 µl
≤ 400 bp	0.85x	42.5 µl

4. Place the sample on a magnetic rack or plate and incubate for 3-10 minutes, or until the magnetic beads have separated from solution.

5. Once the beads have been cleared from solution, remove the supernatant and **transfer the supernatant into a new tube**[3]. Discard the beads.

6. Choose the desired low molecular weight cutoff and add the appropriate amount of **Select-a-Size MagBead Buffer** to the supernatant from step 5 based on the formula below. Mix thoroughly by pipetting up and down or vortexing until homogenous. Incubate this mixture for 2 minutes. The desired fragments will bind onto the MagBeads.

   Note: (Initial sample Volume) x (Second Ratio – First Ratio) = Volume of Select-a-Size MagBead Buffer

   Example: For a size selection between 150-1000 bp with a 50 µl starting sample, add 32.5 µl

   (50 µl) x (1.20 – 0.55) = 32.5 µl

Notes:
The following procedure should be performed at room temperature (15-30°C).

[1] For complete resuspension, allow **Select-a-Size MagBead Buffer** to equilibrate to room temperature (15-30°C).

[2] For maximum recovery, mix samples well and incubate samples for 5 minutes.

[3] Avoid aspirating any beads when removing the supernatant. To best prevent this, leave 2-5 µl of liquid behind.

DNA Fragments Retained	Second Ratio of Select-a-Size MagBead Buffer
≥ 400 bp	0.70x
≥ 300 bp	0.75x
≥ 200 bp	0.80x
≥ 150 bp	1.20x
≥ 100 bp	1.80x

7. Place the sample on a magnetic rack or plate and incubate for 3-10 minutes, or until the magnetic beads have separated from solution.

8. Once the beads have cleared from solution, remove and discard the supernatant

9. While the beads are still on the magnetic rack, add 200 µl of **DNA Wash Buffer**. Remove and discard the supernatant. Repeat this step.

10. While the beads are still on the magnetic rack, aspirate out any residual DNA Wash Buffer. Remove samples from the magnetic rack[4].

11. Add ≥ 25 µl **DNA Elution Buffer** to the beads[5, 6] and mix thoroughly by pipetting up and down or vortexing until homogenous. Incubate at room temperature for 2 minutes.

12. Place the sample on a magnetic rack and incubate for1-2 minutes, or until the magnetic beads have separated from solution.

13. Transfer supernatant to the final tube or plate. The ultra-pure DNA is now ready for use.

Notes:

[4] An optional drying incubation of 3 minutes at room temperature can be performed to ensure all traces of ethanol are removed.

[5] For plates, an elution volume greater than 25 µl may be required in order to guarantee full contact with the magnetic beads.

[6] For microcentrifuge tubes, an elution volume as low as 10 µl can be used to resuspend the beads and obtain a highly concentrated eluate.

Appendix B: Automation Guide for Left-Sided Size Selection (100 bp cutoff)

Note: This protocol assumes that the sample is already on a 96 well plate.

Automation Setup:

1. Completely resuspend the particles within the **Select-a-Size MagBead Buffer** and add 10 ml to a 96 well reagent trough.
2. Add 50 ml **DNA Wash Buffer** to a 96-well reagent trough
3. Add 10 ml **DNA Elution Buffer** to a 96-well reagent trough

Automation Protocol

1. Bring the DNA sample volume up to 50 µl with **DNA Elution Buffer**

   Example: 20 µl starting sample volume
   a. Aspirate 30 µl **DNA Elution Buffer**
   b. Dispense 30 µl **DNA Elution Buffer** into the 96-well Block 2 mm from the container bottom. After dispensing, pipette mix (50 µl for 5 cycles)

2. Using a slow aspirate mode (≤ 50 µl/s flow rate), premix the **Select-a-Size MagBead Buffer** (100 µl for 10 cycles).

3. Using a slow aspirate mode (≤ 50 µl/s flow rate), aspirate 90 µl of Select-a-Size Magbead Buffer.

4. Dispense 90 µl Select-a-Size MagBead Buffer to the 96-Well block containing sample 2 mm from the container bottom.

5. Using a slow aspirate mode (≤ 50 µl/s flow rate), mix the sample (100 µl for 25 cycles). Allow to stand for 2 minutes.

6. Transfer the 96-Well block to a 96-well magnetic stand; allow it to stand for 3 minutes.

7. Using a slow aspirate mode (≤ 50 µl/s flow rate), remove all supernatant and discard. Keep the 96-Well block on a 96-well magnetic stand.

8. Aspirate 200 µl of **DNA Wash Buffer**.

9. Dispense 200 µl of DNA Wash Buffer into the 96-well block 2 mm from the container bottom.

10. Allow 96-well block to stand for 3 minutes on a 96-well magnetic stand.

11. Using a slow aspirate mode (≤ 50 µl/s flow rate), remove 200 µl supernatant and discard.

12. Repeat steps 8-11.

13. Transfer the 96-Well Block from the magnetic stand to a normal plate carrier.

14. Let the 96-well block stand at room temperature for 8 minutes.

15. Aspirate 30 µl **DNA Elution Buffer**.

16. Dispense 30 µl DNA Elution Buffer into the 96-Well block 2 mm from the container bottom. After dispensing, pipette mix (20 µl for 25 cycles).

17. Transfer the 96-Well block to a 96-well magnetic stand; allow it to stand for 3 minutes.

18. Aspirate 25 µl DNA Elution Buffer from the 96-well block.

19. Dispense 25 µl DNA Elution Buffer containing the eluted DNA to the elution plate.

The DNA is now suitable for all downstream applications.

Automation Scripts

The **Select-a-Size DNA Clean & Concentrator Magbead Kit** is combatible with automated platforms. For automation scripts and related technical support, email tech@zymoresearch.com. In the subject line, please include “Automation Scripts” and include the instrument used and the product catalog number.

Troubleshooting Guide:

Problem	Possible Causes and Suggested Solutions
Choosing your cutoff	
How to choose	• The cutoffs listed within the protocol have been constructed to deplete the designated regions. For maximum depletion, choose a cutoff at least 50 bp higher or lower than the size of the undesired species. E.g. Choosing the 100 bp cutoff with dimers at 90 bp can result in some retention of the dimer. In this scenario, the 150 bp cutoff should be selected to ensure complete dimer removal. • Maximum enrichment of the target species is achieved when the difference between the cutoff and the desired fragment is at least 100 bp. Cutoffs chosen with less than 100 bp between the undesired and desired fragments can have lower recoveries around the cutoffs. E.g. If the desired fragments are around 350 bp and the undesired fragments are at 100 bp, choose the 150 bp cutoff for maximum retention of the desired fragment while completely depleting the undesired fragment.
Titrating new cutoffs	• Alternative cutoffs can be identified by fine adjustments of the Select-a-Size MagBead Buffer volume that is added to the sample. The cutoffs provided within the protocol can be used as a guideline to pinpoint more specific cutoffs. In general, as the ratio of Select-a-Size MagBead Buffer to sample increases, the cutoff shifts to the left.
Inaccurate Size Selection	
Inconsistent Size Selection	• **Select-a-Size MagBead Buffer not mixed thoroughly with sample.** Be sure to mix the MagBeads with the sample very well by pipetting or vortexing until homogenous. • **Stray Droplets.** Cutoffs can be very sensitive to slight changes in the ratio of Select-a-Size MagBead Buffer to sample for cutoffs at higher molecular weights. Be vigilant of stray droplets being carried over into the sample. • **Volume of sample.** The sample volume should be at least 50 µl before adding Select-a-Size MagBead Buffer. A lower volume is more prone to effects from pipetting inaccuracy which shifts the size selection.
Tailing of large size range in Right/Double-Sided Size Selection	• **Incomplete Separation.** Allow magnetic beads to completely separate from solution before aspirating out any liquid. The solution should be completely clear with a pellet of beads on the side of the column. Take care not to aspirate out any beads in the first supernatant removal. At this step, the larger fragments are bound onto the beads. To avoid removing these beads, leave 2-5 µl of buffer behind during the first supernatant removal.
Inefficient removal of undesired smaller fragments	• **Incomplete Washing.** The undesired small fragments may be present within the wells of the column/well. To remove these fragments, be sure to perform both wash steps with DNA Wash Buffer thoroughly. • **Pipette Calibration.** Higher cutoffs can be highly sensitive to minor errors in pipetting. Ensure that pipettes are properly calibrated before performing protocol.

Problem	Possible Causes and Suggested Solutions
Low DNA Recovery	
DNA Wash Buffer	• **Ethanol was not added to the DNA Wash Buffer** • **Ensure that the bottle cap is screwed on tightly** after each use to prevent evaporation of the ethanol over time.
Magnetic Separation	• **Incomplete Separation.** Allow magnetic beads to completely separate from solution before aspirating out any liquid. The solution should be completely clear with a pellet of beads on the side of the column. Take care not to aspirate out any beads as the fragments of interest are bound on the beads.
Inefficient Elution	• **Elution volume not large enough.** The minimum elution volume for plates will vary based on the magnetic rack used. The level of the eluate should completely cover the magnetic beads for complete elution. • **Elution volume not large enough.** Decreasing the elution volume can lead to a decrease in the recovery. The smaller the elution volume, the more difficult it will be to aspirate the eluate without carrying beads. • **Beads not resuspended.** When performing the elution with small volumes, it is critical to locate the pellet and resuspend the magnetic beads.
Drying Time	• **Do not over dry the MagBeads.** For complete removal of ethanol, resuspend samples with DNA Elution buffer within three minutes of drying. Extended drying times reduce the elution efficiency of the beads.
Inefficient Binding	• **Mix sample with MagBeads well and incubate for at least 2 minutes.** To maximize the recovery of DNA, samples should be mixed thoroughly and can be incubated at room temperature for 5 minutes. For thorough mixing, pipette the entire reaction volume up and down 10 times or vortex sample for 30 seconds. These additional steps are most helpful for sample volumes larger than 50 µl
Cutoff too close to target	• **The cutoffs are not distinct.** For most efficient recovery, choose a cutoff as far removed from the desired fragments as possible. E.g. If the desired fragments are around 500 bp and the undesired fragments are at 50 bp, choose the 100 bp cutoff for maximum retention of the desired fragment while completely depleting the undesired fragment. Choosing a higher cutoff results in diminished recovery of the desired fragments.
Range of selection too small for double sided size selection	• **Target region too small.** For a double-sided size selection, the recovery of a target region decreases significantly as the target region decreases. To maximize recovery of the target range, the two cutoffs should be as far apart as possible in order to increase the size of the target range.
Low DNA Quality	
Low 260/230	• **Salt Contamination.** Ensure that both wash steps are performed to thoroughly remove any residual salt contamination. Incomplete washing will result in low 260/230 ratios. • **Ethanol Contamination.** To prevent ethanol contamination, remove as much DNA Wash buffer as possible before drying beads. Samples can be given a quick spin to bring down remaining buffer before transferring to magnetic rack to aspirate any residual buffer. Alternatively, allow samples to air dry at room temperature for 3 minutes before resuspending with DNA Elution Buffer.
DNA Elution Buffer	
DNA Elution Buffer	• DNA Elution Buffer (10 mM Tris-HCl, 0.1 mM EDTA, pH 8.5)

Ordering Information.

Product Description	Kit Size	Catalog No.
Select-a-Size DNA Clean & Concentrator MagBead Kit	10 ml	D4084
Select-a-Size DNA Clean & Concentrator MagBead Kit	50 ml	D4085

For Individual Sale	Amount	Catalog No.
Select-a-Size MagBead Set	10 ml 50 ml	D4084-10 D4084-50
DNA Wash Buffer (concentrate)	24 ml 48 ml	D4003-2-24 D4003-2-48
DNA Elution Buffer	10 ml 16 ml 50 ml	D3004-4-10 D3004-4-16 D3004-4-50
Collection Plate	C2002	2 plates
Elution Plate	C2003	2 plates
96-Well Plate Cover Foil	C2007-2 C2007-4 C2007-8	2 4 8
ZR-96 MagStand	P1005	1