extractman®

User's Guide

GILSON®

Gilson, Inc. | PO Box 620027 | Middleton, WI 53562-0027 | Tel: 608-836-1551 OR 800-445-7661 | Fax: 608-831-4451
Gilson S.A.S. | 19, avenue des Entrepreneurs | BP 145, F-95400 Villiers-le-bel, FRANCE
www.gilson.com | sales@gilson.com | service@gilson.com | training@gilson.com

LT310210-01

Description

EXTRACTMAN® leverages proprietary Exclusion-based Sample Preparation (ESP™) technology to gently and quickly target proteins from a variety of samples, including weakly-bound protein complexes that traditional isolation techniques leave behind. The sliding handle processes up to four samples simultaneously in as few as 30 seconds.

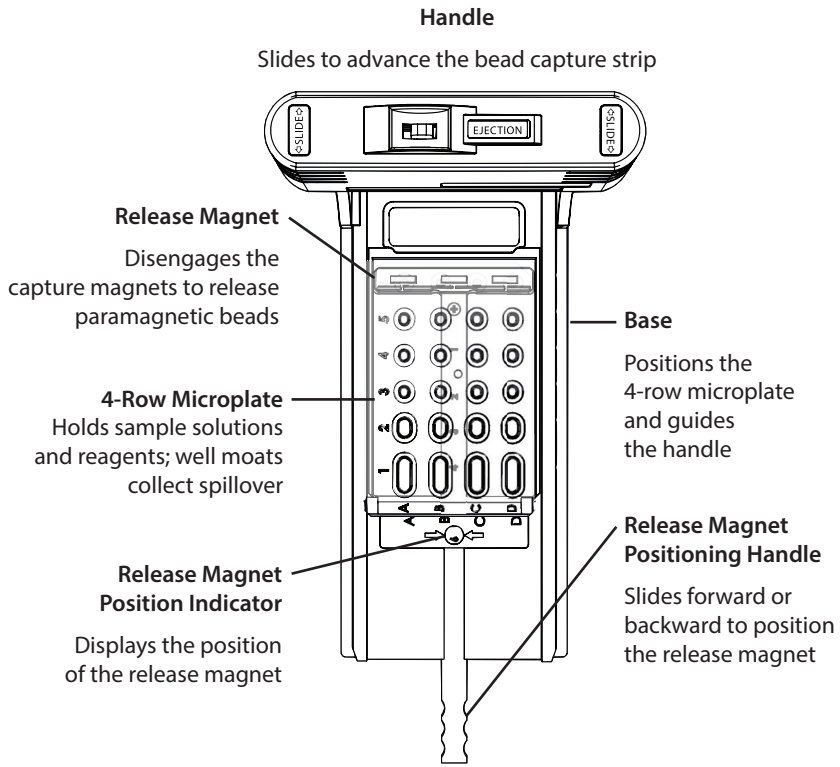

Figure 1: EXTRACTMAN® Component Descriptions

Input, Wash, and Output Volumes

- The first well column (460–500 µL) was designed for input wells.
- The second (230–275 µL) and third (100–110 µL) well columns were designed for input or wash wells.
- The fourth and fifth (100–110 µL) well columns were designed for wash wells.
- The sixth (10–15 µL) well column was designed for output wells.

NOTE	Well volumes may vary because the formation of stable, prominent menisci may require the addition or subtraction of reagent, depending on the surface tension of the reagent used.

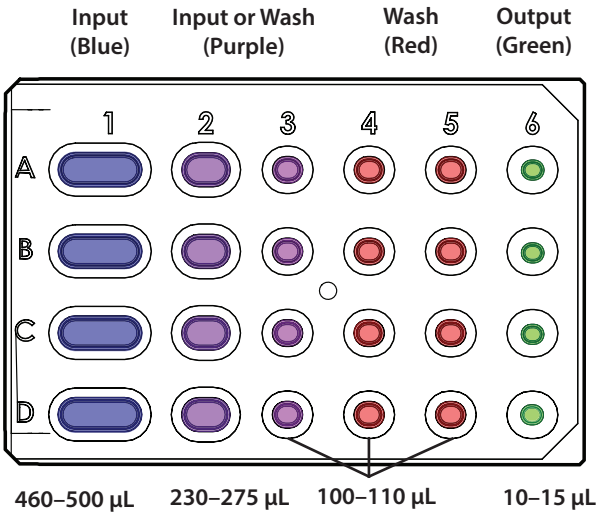

Figure 10: Input, Wash, and Output Well Locations

3. Fill each subsequent well with wash or reagent solution.

NOTE	Wells should have prominent menisci to ensure proper contact with the bead capture strip.

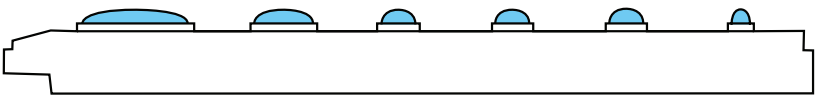

Figure 11: Prominent Menisci on the 4-Row Microplate

Bead Size and Optimal Operation

The size of paramagnetic beads affects their time to pellet, suspension dynamics, and performance.

Adjust Protocols for Large Paramagnetic Beads

Larger paramagnetic beads exert greater magnetic force than smaller beads, resulting in a faster time to pellet. This dynamic may cause larger paramagnetic beads to pull off the bead capture strip prematurely. This can be avoided by raising the height of the bead capture strip. Refer to **Adjust the Collection Height** on page 22.

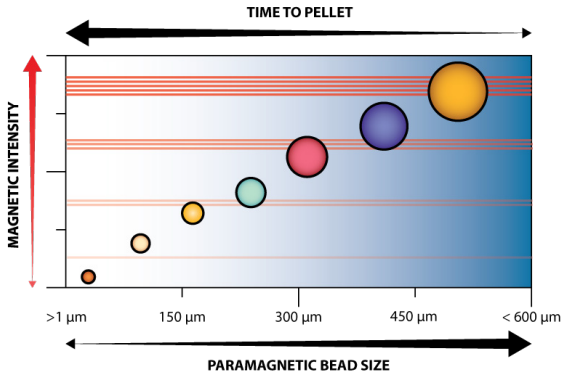

Figure 22: Magnetic Intensity and Paramagnetic Bead Size

Adjust Protocols for Small Paramagnetic Beads

Smaller paramagnetic beads exert less magnetic force than larger beads, resulting in a slower time to pellet. This dynamic may result in longer capture times. Gilson recommends waiting a few moments after the bead discoloration in the wells has cleared before advancing to the next well column.

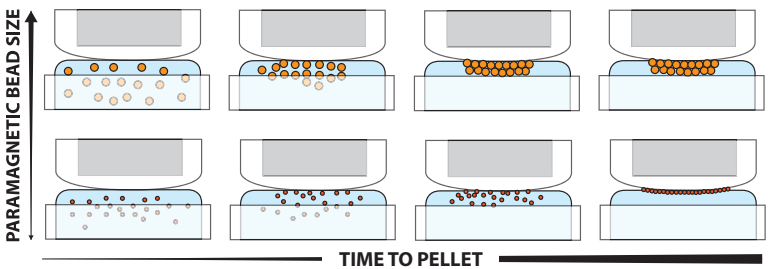

Figure 23: Paramagnetic Bead Size and Time to Pellet