

Ab-Capcher Mag™

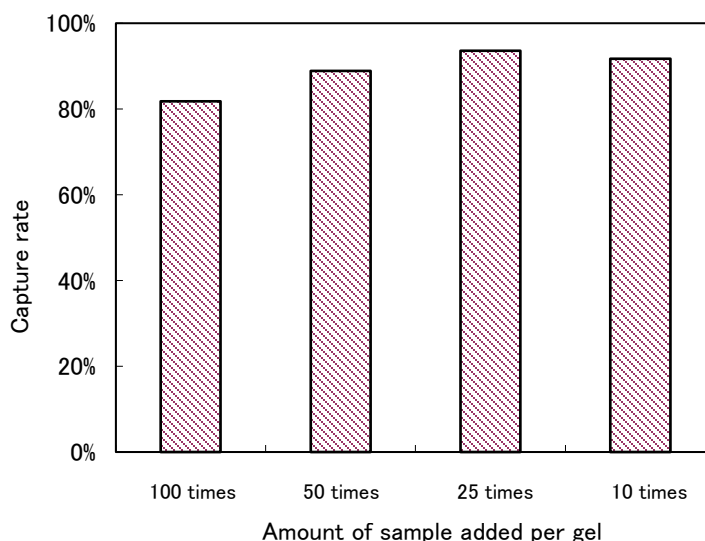
Effect of sample volume on human IgG capture rate

Operating procedure

Human IgG (0.5, 1, 2, 5 mg/mL)
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Add to Ab-Capcher Mag™ (10 μL)
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Reaction (Shake for 2 hours, let stand overnight at 4° C)
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Wash (PBS)
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Elute with 0.1 M Glycine-HCl (pH 2.8)

Sample addition amount (held at 50 mg/mL gel)

Addition amount per gel	IgG concentration	Addition amount	Bound IgG (mg/mL gel)	Capture rate
100 times	0.5 mg/mL	1000 μL	37.6	81.8%
50 times	1 mg/mL	500 μL	43.1	88.9%
25 times	2 mg/mL	250 μL	46.6	93.6%
10 times	5 mg/mL	100 μL	46.8	91.7%



When performing batch purification, the IgG capture rate will decrease as the sample volume exceeds the gel volume. Therefore, the amount of captured antibody was measured and compared using sample volumes 10, 25, 50 and 100 times that of gel. The amount of antibody added per gel was 50 mg/mL. The observed capture rate was about 90% at sample volumes between 10 to 50 times the gel volume and 82% at a sample volume of 100 times per gel. Thus, It is possible to use Ab-Capcher Mag™ in amounts as low as 1/100th the volume of a sample. And it is possible to increase the antibody recovery rate by increasing the gel amount to greater than 1/100th sample volume.