

Ab-Capcher™ alkaline stability

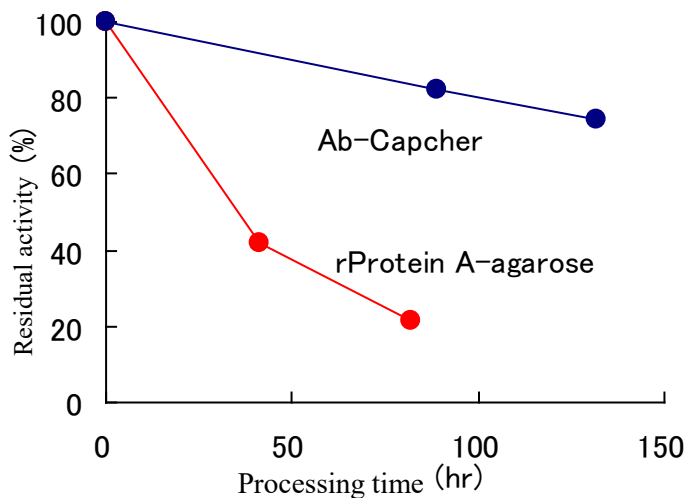
Alkaline treatment

Affinity gel carrier (spin column)
↓
Wash three times with alkaline solution
↓
Replace with alkaline solution
↓
Incubate at 25° C
↓
After designated time, wash with PBS
↓
Equilibrate with PBS
↓
Binding activity measurement

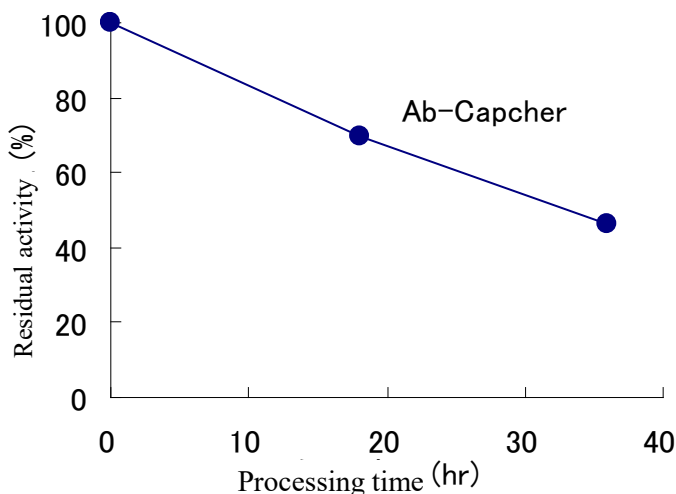
Activity measurement

Human serum gamma globulin solution
(40 mg/mL)
↓
Addition to affinity gel (spin column)
↓
Shake (1 hour)
↓
Wash (PBS)
↓
Elute with 0.1 M Glycine-HCl (pH 2.8)
(Add 1 M Tris to neutralize)
↓
A280nm measurement

0.1 N NaOH processing



0.5 N NaOH processing



Ab-Capcher™ is an alkaline-stable Protein A-R28 immobilized on highly cross-linked agarose. In order to evaluate its alkaline stability, antibody binding activity was measured after various times of exposure to 0.1N and 0.5N NaOH solutions. Commercially available rProtein A agarose gel showed a human IgG binding activity of 21% when treated with 0.1N NaOH for 82 hours, whereas Ab-Capcher™ had an IgG binding activity of 83% even after 89 hours treatment with 0.1N NaOH. Further, 70% of its binding activity remained even after treatment with 0.5 N NaOH for 18 hours. These results demonstrate that Ab-Capcher™ is an alkaline resistant gel carrier that can be washed with either 0.1N NaOH or 0.5N NaOH for short periods of time.