

F2

Native Bovine Thrombin, Immobilized

Catalog No.	CRU131A CRU131B	Quantity:	2 ml packed resin 5 ml packed resin
Alternate Names:	Prothrombin, Coagulation factor II, F2		
Description:	Immobilized Bovine Thrombin is ideal for cleavage of recombinant fusion proteins with an Leu-Val-Pro-Arg/Gly-Ser thrombin recognition sequence. The agarose resin is easily removed by centrifugation or filtration and is reusable.		
UniProt ID:	P00735		
Concentration:	2.0 mg/ml coupled, lot specific		
Source:	Bovine plasma		
Formulation:	1:1 slurry of resin in 0.1 M Tris, 0.15 M NaCl, 0.02% sodium azide, pH 7.5		
Purity:	> 95% by SDS-PAGE analysis		
Volume:	4ml or 10ml of 1:1 slurry		
Biological Activity:	Immobilized Thrombin Digestion Protocol <ol style="list-style-type: none">1. Make a digestion buffer consisting of 0.05M Tris-HCl, 0.01M CaCl₂, pH 8.02. Dissolve 1 mg of your protein sample in 1 ml digestion buffer3. Wash 0.05-0.1ml of immobilized thrombin with 3 x 0.5ml of digestion buffer. Separate the gel from the buffer after each wash by centrifugation or by column. Discard buffer after each wash4. Resuspend the washed immobilized thrombin gel in ~0.2ml of digestion buffer then add the resin to your protein sample5. Incubate mixture in a shaking water bath for 1-2 hours at 37°C, or overnight at 4°C, with rapid agitation6. Separate the immobilized thrombin gel from the digestion mixture as noted in step 3. Retain supernatant as your thrombin-digested protein sample		
Application Notes:	Optimization of immobilized thrombin protocol is required for specific applications. Recommended reaction conditions are pH 7.0 to 9.0 at 37°C. The reaction rate will be increased by increasing the enzyme to protein substrate ratio and incubation temperature. For example, a typical digestion of 4 hours to overnight can be achieved using a ratio of 1:25 enzyme to protein substrate, while it is recommended to use 1:10 enzyme to protein substrate for accelerated thrombin digestion (30-60 minutes).		
Storage & Stability:	Store at 2-8°C for up to 1 year.		

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