

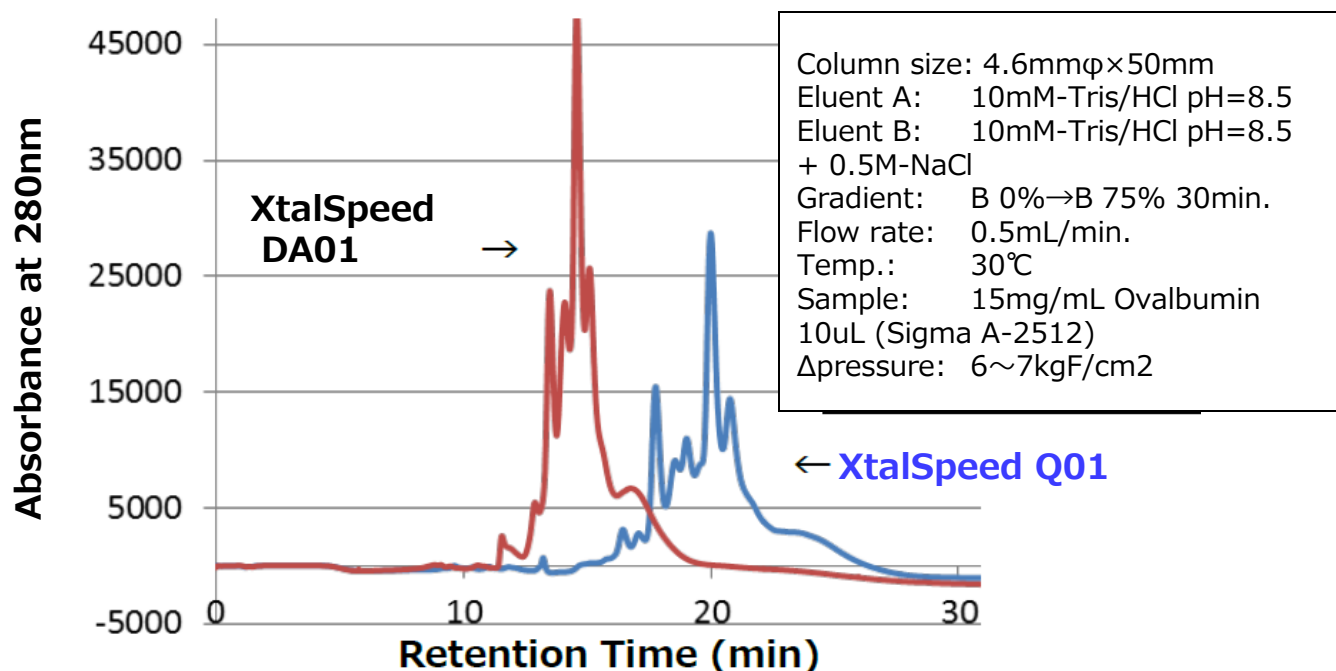
XtalSpeed™

About XtalSpeed™

- ◆ High Resolution
- ◆ Least non-specific protein binding
- ◆ Durable for large sample loadings
- ◆ Both Analytical & Preparative use with a single column
- ◆ First choice for protein kinase crystallization (DA01)
- ◆ Antibody variants analysis and semi-preparation (SP01)

New Comer!

Analysis of ovalbumin with **XtalSpeed™ Q01** and **DA01**



Column list

Name	Functional Group	Column size	Column volume	Housing
SP01	Sulfopropyl	Φ4.6mm×50mm	0.8mL	PEEK
DA01	Diethylaminoethyl	Φ4.6mm×100mm	1.6mL	
Q01	Quaternary ammonium	Φ7.5mm×100mm Φ11.5mm×100mm	4.4mL 10.4mL	

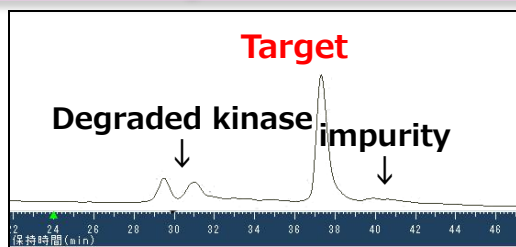


XtalSpeed™ DA01 Application Data

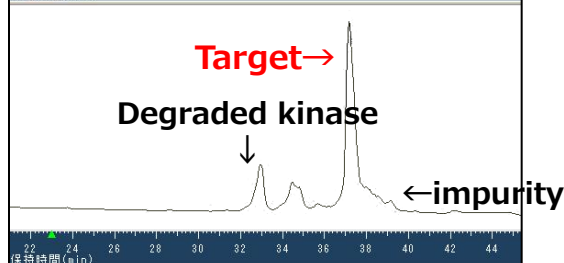
<Purification of basic kinase (MW c.a. 100kDa)>

XtalSpeed showed highest resolution with just 5cm column

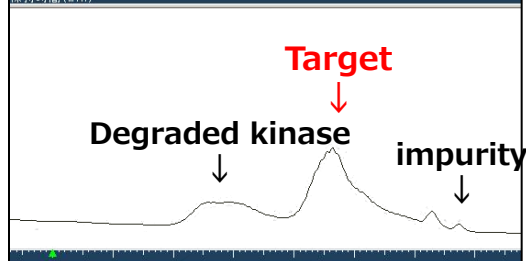
XtalSpeed™
DA01
0.6mL/min



Tosoh Stat
1.0mL/min



Resource
1.0mL/min



Column Size

DA01 $\Phi 4.6 \times 50$ mm

Stat $\Phi 4.6 \times 100$ mm

Resource $\Phi 6.4 \times 30$ mm

Load: 50 μ g

Eluent

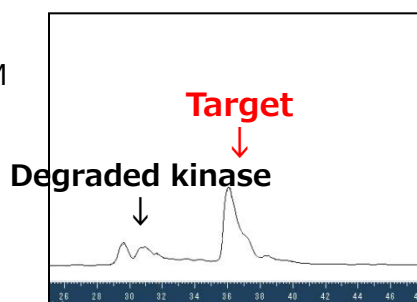
A: 50mM HEPES-NaOH(pH7)

B: A + 1M NaCl

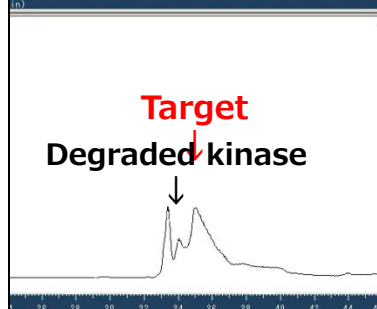
Gradient: 0-40%B/40CV

☆ With sample Loading of 400 μ g ☆

XtalSpeed™
DA01
0.6mL/min



Tosoh Stat
1.0mL/min



You can use XtalSpeed as Preparative column.

- ☆ High recovery!
- ☆ High Purity!
- ☆ High Speed!

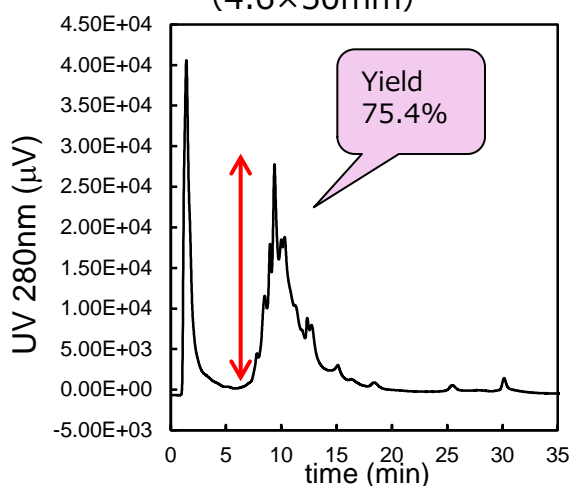
Save your time to purify your protein!

 MITSUBISHI CHEMICAL

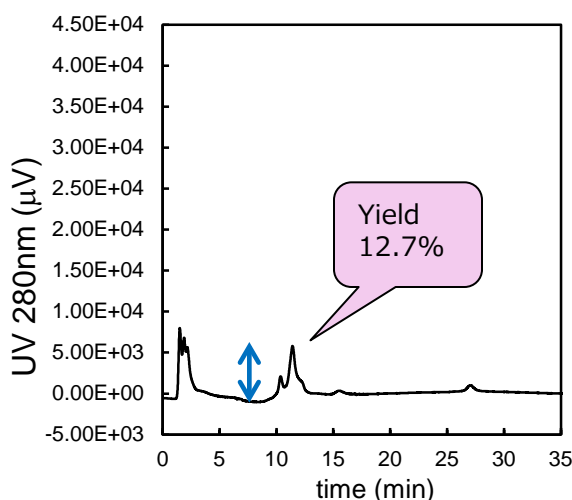
XtalSpeed™ SP01 Application

◆ Purification of Zein (Protein from corn)

XtalSpeed™ SP01
(4.6×50mm)

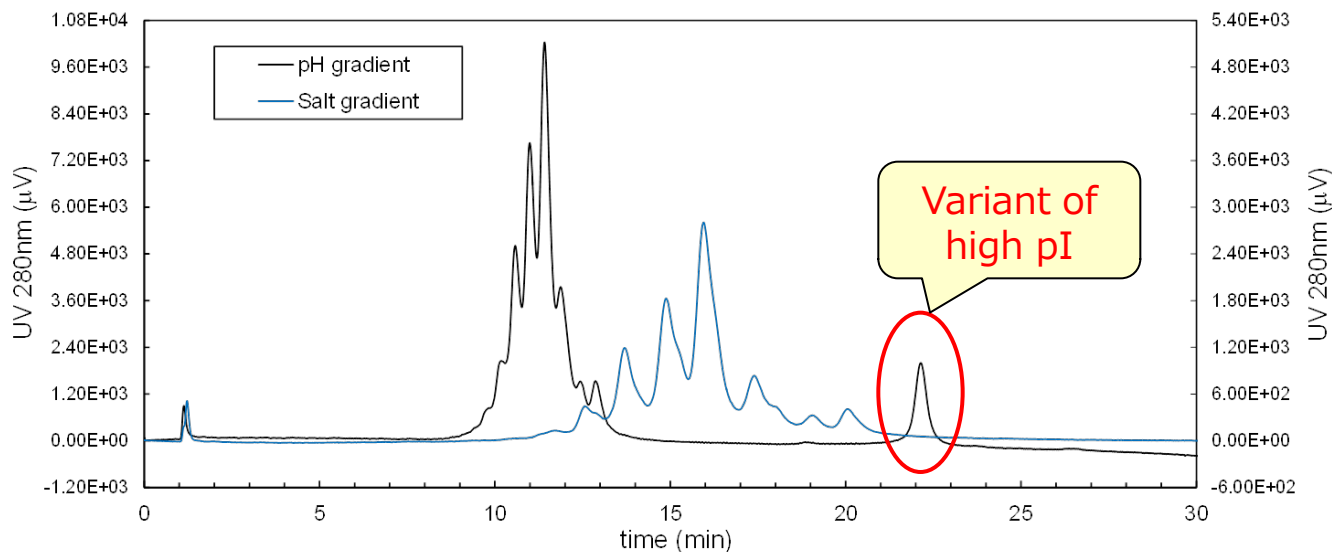


Resource



Conditions: Eluent A, 20mM Acetic acid + 6M Urea (pH4.24);
Eluent B, A + 1.0M NaCl (pH3.99);
Flow rate, 0.5ml/min;
Gradient, 0-50% B over 30min.
Sample: Zein (4mg/ml - eluent A); Injection, 20ml.

◆ Chromatogram of Antibody variants; pH/NaCl gradient



pH gradient system

- Eluent:
 - (A) CX-1pH Gradient Buffer A (pH 5.6)
 - (B) CX-1pH Gradient Buffer B (pH 10.2);
- Gradient : 0-100%B over 30min
+ 100%B over 5min;
- Sample: Erbitux (0.5mg/ml), 40ml.

Salt gradient system

- Eluent:
 - (A) 20mM Na phosphate (pH6.5)
 - (B) (A) + 1M NaCl;
- Gradient : 0-5%B over 30min
+ 5-100%B over 5min;
- Sample: Erbitux (0.5mg/ml), 20ml.

