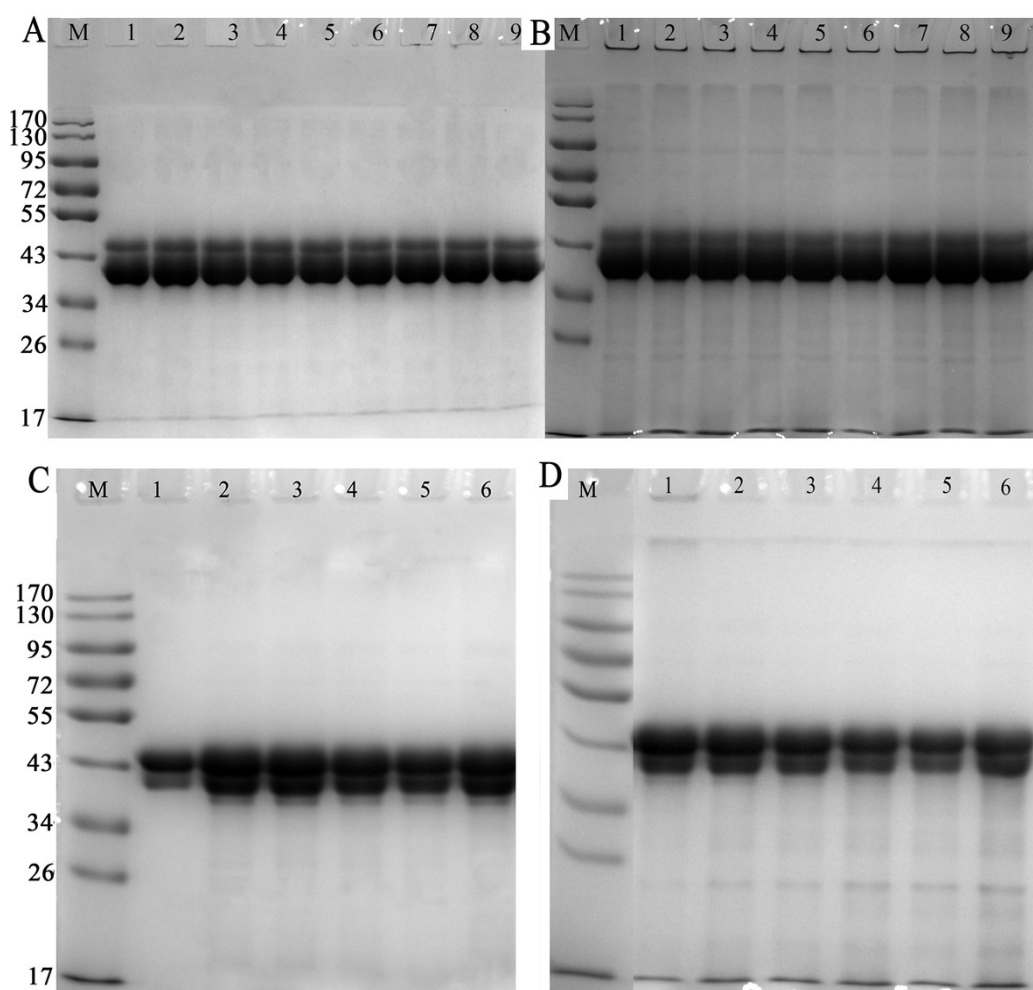


SFigure.1 The UV spectrum analysis of heat pre-treatments on OVA.



SFigure.2 The SDS-PAGE analysis of different chemical denaturants (DTT,  $\beta$ -mercaptoethanol and L-Cys) on the cross-linking of OVA. (A) Effect of DTT and  $\beta$ -mercaptoethanol pre-treatment on OVA (as a control group of B). (B) Effect of DTT

and  $\beta$ -mercaptoethanol pre-treatment on the cross-linking of OVA. Lane M: Marker, lane 1: Native OVA, lane 2: 0.005% DTT, lane 3: 0.01% DTT, lane 4: 0.02% DTT, lane 5: 0.03% DTT, lane 6: 0.01%  $\beta$ -mercaptoethanol, lane 7: 0.02%  $\beta$ -mercaptoethanol, lane 8: 0.04%  $\beta$ -mercaptoethanol, lane 9: 0.06%  $\beta$ -mercaptoethanol.

(C) Effect of L-Cys pre-treatment on OVA (as a control group of D). (D) Effect of L-Cys pre-treatment on the cross-linking of OVA. Lane 1: OVA, lane 2: 0.04% L-Cys, lane 3: 0.08% L-Cys, lane 4: 0.12% L-Cys, lane 5: 0.16% L-Cys, lane 6: 0.2% L-Cys.