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**A Multifunctional Tag with the Ability to Benefit the Expression, Purification, Thermostability  
and Activity of Recombinant Proteins**

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**Highlights**

- A novel expression and purification tag (S1v1) with the ability to enhance thermostability and activity of proteins was generated from a self-assembling amphipathic peptide.
- S1v1 was more effective than the frequently used His-tag during protein expression, stabilization and purification in the three proteins reported.
- S1v1 fusion will be especially suitable for those proteins requiring a simultaneous enhancement of production, catalytic properties and purification yield..

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