

Supplementary data

Figure S1. SDS PAGE showing purification of recombinant serratiopeptidase using 2M and 7M urea. Lane 1 and 3—solubilized inclusion bodies using 2M urea; lanes 2 and 4—solubilized inclusion bodies using 7M urea; M—marker; lanes E1 and E3—purified recombinant serratiopeptidase using 2M urea; and lanes E2 and E4—purified recombinant serratiopeptidase using 7M urea.

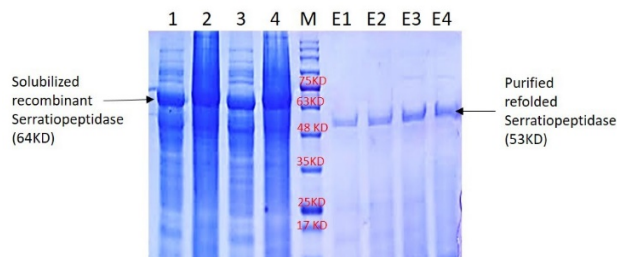
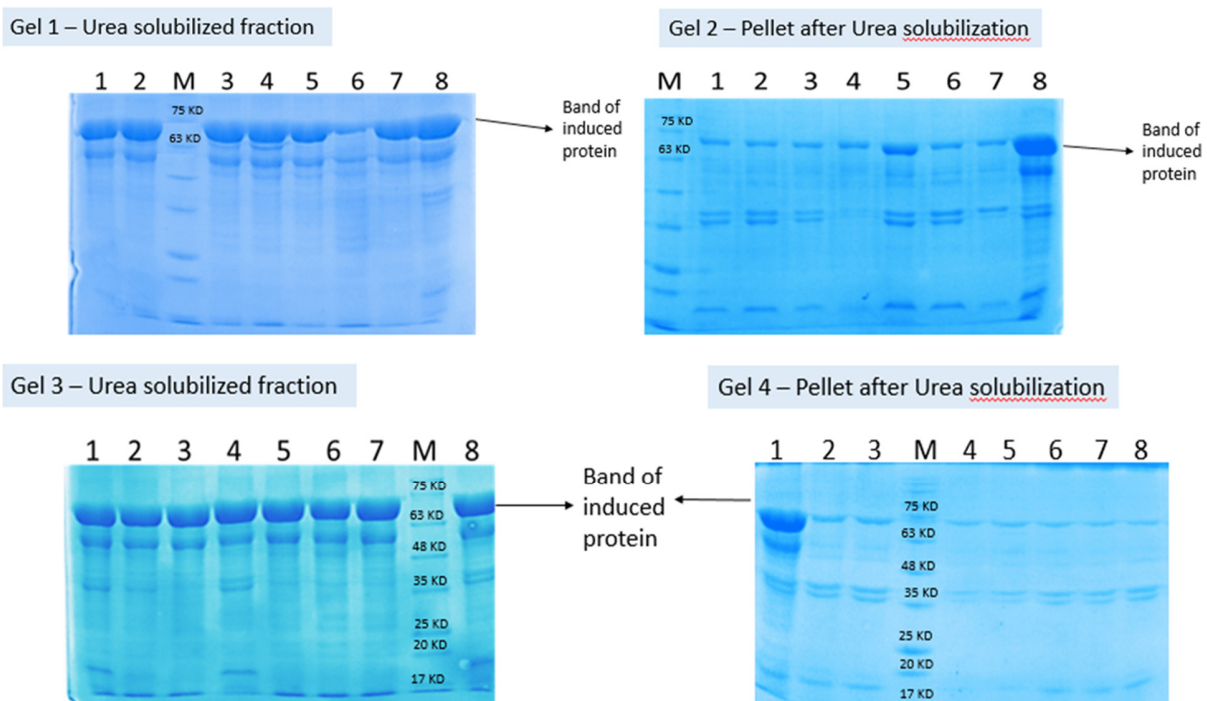


Figure S2. SDS PAGE of different supplements tried for enhancing solubilization of recombinant serratiopeptidase.



Annotation (Gel 1):

1. IB pellet subjected to solubilization
 2. Buffer containing 2M urea, pH 9
 3. Buffer containing 2M urea, pH 10
 4. Buffer containing 2M urea, pH 11
 5. Buffer containing 2M urea, pH 12
 6. Buffer containing 2M urea, pH 6
 7. Buffer containing 2M urea and 0.5% SDS, pH 8
 8. Buffer containing 2M urea and 1% SDS, pH 8
- M - Marker

Annotation (Gel 2):

M—Marker

1. Buffer containing 2M urea, pH 9M
2. Buffer containing 2M urea, pH 10
3. Buffer containing 2M urea, pH 11
4. Buffer containing 2M urea, pH 12
5. Buffer containing 2M urea, pH 6
6. Buffer containing 2M urea and 0.5% SDS, pH 8
7. Buffer containing 2M urea and 1% SDS, pH 8
8. IB pellet subjected to solubilization

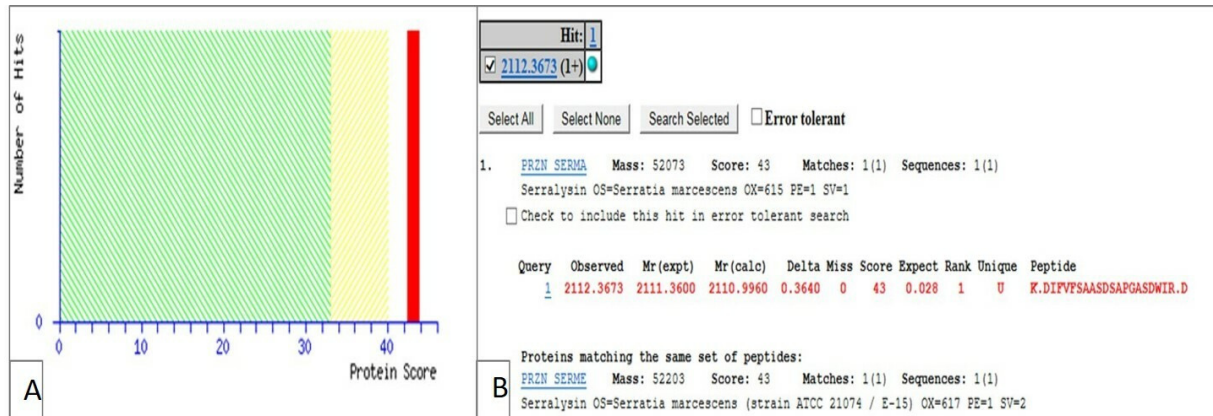
Annotation (Gel 3):

1. IB pellet subjected to solubilization
 2. Buffer containing 2M urea, pH 8, freeze thaw
 3. Buffer containing 2M urea, pH 8
 4. Buffer containing 3M urea, pH 8
 5. Buffer containing 4M urea, pH 8
 6. Buffer containing 5M urea, pH 8
 7. Buffer containing 6M urea, pH 8
 8. Buffer containing 7M urea, pH 8
- M—Marker

Annotation (Gel 4):

1. IB pellet subjected to solubilization
 2. Buffer containing 2M urea, pH 8, freeze thaw
 3. Buffer containing 2M urea, pH 8
 4. Buffer containing 3M urea, pH 8
 5. Buffer containing 4M urea, pH 8
 6. Buffer containing 5M urea, pH 8
 7. Buffer containing 6M urea, pH 8
 8. Buffer containing 7M urea, pH 8
- M—Marker

Figure S3. A MASCOT score histogram of purified recombinant serratiopeptidase; **B** MASCOT database hit confirming the purified protein to be recombinant serratiopeptidase.



Sequence 1—serratiopeptidase fusion protein (Molecular weight: 65.574 kD)

MGSSHHHHHGSGLVPRGSASMSDSEVNQEAKPEVKPEVKPETHINLKVSDGSSEIFFKI
 KKTTPRLRLMEAFKRQKGEMDSLRLFLYDGIQADQTPEDLDMEDNDIIEAHREQIGG
 MQSTKKAIEITESSLAATTGYDAVDDLLHYHERGNGIQINGKDSFSNEQAGLFITRENQ
 TWNGYKVFQGPVKLTFSFPDYKFSSTNVAGDTGLSKFSAEQQQQAKLSLQSWADVANI
 TFTEVAAGQKANITFGNYSQDRPGHYDYGTQAYAFNPNTIWQGGQDLGGQTWYNVNQS
 NVKHPATEDYGRQTFTHEIGHALGLSHPGDYNAGEGNPTYRDVTYAEDTRQFSLMSYW
 SETNTGGDNGGHYAAAPLLDDIAAIQHLYGANLSTRTGDTVYGFNSNTGRDFLSTTSNS
 QKVIFAAWDAGGNDTFDFSGYTANQRINLNEKSFSQSDVGGLKGNVSIAAGVTIENAIGGS
 GNDVIVGNAANNVLKGGAGNDVLFGGGGADELWGGAGKDIFVFAASDSAPGASDWI
 RDFQKGIDKIDLSFFNKEAQSSDFIHFVDHFSGTAGEALLSYNASSNVTDL SVNIGGHQA
 PDFLVKIVGQVDVATDFIV

Sequence 2—purified mature serratiopeptidase (Molecular weight: 50.458kD)

AATTGYDAVDDLLHYHERGNGIQINGKDSFSNEQAGLFITRENQ TWNGYKVFQGPVKL
 TFSFPDYKFSSTNVAGDTGLSKFSAEQQQQAKLSLQSWADVANITFTEVAAGQKANITF
 GNYSQDRPGHYDYGTQAYAFNPNTIWQGGQDLGGQTWYNVNQSNVKHPATEDYGRQT
 FTHEIGHALGLSHPGDYNAGEGNPTYRDVTYAEDTRQFSLMSYWSSETNTGGDNGGHYA
 AAPLLDDIAAIQHLYGANLSTRTGDTVYGFNSNTGRDFLSTTSNSQKVIFAAWDAGGND
 TDFSGYTANQRINLNEKSFSQSDVGGLKGNVSIAAGVTIENAIGGS GNDVIVGNAANNVL

KGAGNDVLFGGGGADELWGGAGKDIFVFSAA SDSAPGASDWIRDFQKGIDKIDLSFF
NKEAQSSDFIHFVDHFSGTAGEALLSYNASSNVTDL SVNIGGHQAPDFLVKIVGQVDVA
TDFIV