



## SUMOstar Protease 1 (Cat. No. 4110)

### Description and Application

SUMOstar Protease, a highly active and robust recombinant protease, cleaves SUMOstar from recombinant fusion proteins. Unlike thrombin, EK, or TEV protease, whose recognition sequences are short and degenerate, SUMOstar Protease recognizes the tertiary structure of SUMOstar. As a result, SUMOstar Protease will not cleave within the protein of interest.

### Components

Units: 500, 1000, 5000, 10000 units

### Unit Definition

One unit of SUMOstar Protease 1 cleaves 90% of 100 µg of SUMOstar-GFP in 1 h at 30°C.

### Restoration & Storage Conditions

1. Store vial at -80°C prio
2. Aliquot and store at -80°C after thawing. Avoid repeated freeze-thaw cycles. SUMOstar Protease is stable for more than one year under these conditions.

### Protocol

1. After SUMOstar-protein fusion is purified: dialyze sample against proper buffer (e.g. PBS, pH 7.4 or 20 mM TRIS, pH 8.0 containing 150 mM NaCl) at 4°C.
2. Add SUMOstar Protease 1 to substrate (1 unit enzyme to 10-100 µg substrate should suffice, depends on SUMOstar fusion protein); add DTT to final 2 mM.
3. Either:
  - a. incubate the mixture at 30°C for 1 h (mix gently do not vortex), or
  - b. incubate the mixture at 4°C overnight (you can also perform a. followed by b.)
4. Check the cleavage using SDS-PAGE. If the SUMOstar-fusion is not cleaved up to 95%, add more SUMOstar protease 1.

### References

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