TEV Protease Kit

TEV protease kit that may be used for cleaving proteins or peptides containing the TEV protease recognition sequence E-N-L-Y-F-Q ↓ (S/G/A/M/C/H).



Product attributes

Call us: 800-304-5357 Email: btinfo@biotium.com

Product Description

The TEV Protease Kit may be used for cleaving proteins or peptides containing the TEV protease recognition sequence E-N-L-Y-F-Q ↓ (S/G/A/M/C/H). The kit includes recombinant TEV expressed from *E. coli*, Control Substrate (MBP-TEV substrate-His6), and 10X Reaction Buffer.

TEV protease is a highly sequence-specific cysteine protease from Tobacco Etch Virus (TEV). The TEV Protease recognition sequence with the highest catalytic efficiency is the sequence Glu-Asn-Leu-Tyr-Phe-Gln-Ser with optimal cleavage occurring between the Gln and Ser residues. However, the amino acid in the P1' position (amino acid immediately downstream of the cleavage site) can also be Gly, Ala, Met, Cys, or His. The protease is used to cleave affinity tags such as maltose-binding protein (MBP) or poly-histidine from fusion proteins. The optional temperature for cleavage is 30 °C but it can also be used at temperatures as low as 4 °C.

Biotium's recombinant TEV is expressed from *E. coli* as a single, non-glycosylated polypeptide chain with N-terminal 7X His-tag for easy removal from the reaction using nickel affinity chromatography. The TEV Kit includes Control Substrate as an optional reaction control. It is a His-tagged fusion protein (MBP-TEV substrate-His6) around 80.3 kDa, observed by reducing SDS-PAGE. When Control Substrate is cleaved with TEV, two bands at 43.3 kDa and 37 kDa are observed under reducing SDS-PAGE.

For confirming substrate cleavage by SDS-PAGE, we recommend using our convenient and non-hazardous One-Step Blue® Protein Gel Stain. Biotium also offers a Monoclonal Mouse anti-6X His Tag Antibody for confirming cleavage of the Control Substrate by western blot.

This datasheet was generated on November 3, 2025 at 07:59:00 PM. Visit product page to check for updated information before use. Product link: https://biotium.com/product/tev-protease-kit/