

Kex2 Protease from *Saccharomyces cerevisiae*, Recombinant

Cat. No. NATE-1891

Lot. No. (See product label)

Introduction

Description Kex2 is a Ca^{2+} -dependent serine protease and cleaves at C-terminal site of Lys-Arg, Arg-Arg, Pro-Arg in pro- α -factor and killer-toxin precursors maturing, it was discovered in *Saccharomyces cerevisiae*. But Kex2 can't recognize and cut a single basic amino acid, such as carboxyl end peptide bond of arginine and lysine. Recombinant Kex2 is a genetically engineered protein expressed in *Pichia pastoris* and purified by high pressure liquid chromatography. The activity of Kex2 is not affected by the conventional serine protease inhibitors such as PMSF, TPCK, TLCK inhibition.

Synonyms KEX2 protease; KEX2; protease; kexin; EC 3.4.21.61

Product Information

Species *Saccharomyces cerevisiae*

Source *Pichia pastoris*

Form White lyophilized

EC Number EC 3.4.21.61

Molecular Weight 67 ± 6.7 kD

Activity >10 unit/mg protein

pH Stability 5.0-6.0

Optimum pH 9

Optimum temperature 37°C

Buffer Recommend storage buffer: pH 5.0-5.5 20mM NaAc-HAc buffer and 2mM Ca^{2+} . Recommend reaction buffer: pH 7.0-9.0 50mM Tris-HCl or HEPES, 5mM Ca^{2+} . To prepare 1-10mg/ml Kex2 solution with 20mM NaAc-HAc (pH 5.2) and 2mM Ca^{2+} for a stored solution, and diluted with reaction buffer such as pH 7.0-9.0 50mM Tris-HCl or HEPES, 5mM Ca^{2+} . If used after dissolved immediately, with the reaction buffer pH 7.0-9.0 50mM Tris-HCl or HEPES, 5mM Ca^{2+} to dissolve directly.

Unit Definition One unit of Kex2 activity will release $1\mu\text{mol}$ 4-nitroaniline per minute in a reaction volume of 3.0 ml at pH 8.0 and 25°C with Boc-QRR-pNA (Boc-Gln-Arg-Arg-pNA) as the substrate.

Storage and Shipping Information

Storage Recommended storage temperature: 2°C - 8°C . Transport condition: blue ice to keep the environment cool. It should be stored in 20mM NaAc-HAc (pH 5.0-5.5) and 2mM Ca^{2+} . It is stable after 5 cycles freezing and thawing.