Creative Enzymes®

Kex2 Protease from Saccharomyces cerevisiae, Recombinant

Cat. No. NATE-1891

Lot. No. (See product label)

Introduction

Description	Kex2 is a Ca2+-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 ºC
Buffer	Recommend storage buffer：pH5.0-5.5 20mM NaAc-HAc buffer and 2mM Ca2+. Recommend reaction buffer: pH 7.0-9.0 50mM Tris-HCl or HEPES, 5mM Ca2+ . To prepare 1-10mg/ml Kex2 solution with 20mM NaAc-HAc (pH 5.2) and 2mM Ca2+ for a stored solution, and diluted with reaction buffer shch as pH 7.0-9.0 50mM Tris-HCl or HEPES, 5mM Ca2+. If used after dissolved immediately, with the reaction buffer pH 7.0-9.0 50mM Tris-HCl or HEPES, 5mM Ca2+ to dissolve directly.
Unit Definition	One unit of Kex2 activity will release 1μmol 4-nitroaniline per minute in a reaction volume of 3.0 ml at pH8.0 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 Ca2+. It is stable after 5 cycles freezing and thawing.