



Recombinant Yeast Kex-2

20200527BB



FOR RESEARCH ONLY! NOT FOR HUMAN USE!

Cat.-no.:	100-415
Size:	250 µg
Lot. No.:	According to product label

Scientific Background

Gene-ID (NCBI):	855483
Synonyms:	Endoproteinase Lys/Arg-Arg, Protease KEX2, Proteinase YSCF

Proteases (also called Proteolytic Enzymes, Peptidases, or Proteinases) are enzymes that hydrolyze the amide bonds within proteins or peptides. Most proteases act in a specific manner, hydrolyzing bonds at or adjacent to specific residues or a specific sequence of residues contained within the substrate protein or peptide. Proteases play an important role in most diseases and biological processes including prenatal and postnatal development, reproduction, signal transduction, the immune response, various autoimmune and degenerative diseases, and cancer. They are also an important research tool, frequently used in the analysis and production of proteins. Kex-2 cleaves at the carboxyl end of the recognition sequences Arg-Arg/X and Lys-Arg/X. Recombinant Yeast Kex-2 is a 60.4 kDa protease consisting of 558 amino acid residues.

Sequence

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LPVFAPPMDSSLLPVKEAEDKLSINDPLFERQWHLVNPSPFGSDINVLDLWY
NNITGAGVVAIVDDGLDYENEDLKDNFCAEGSWDFNDNTNLPKPRLSDDYH
GTRCAGEIAAKKGNFCVGVGYNAKISGIRILSGDITTEDEAASLIYGLDV
NDIYSCSWGPAADDGRHLQGPSDLVKALVKGVTEGRDSKGAIYVFASNGGT
RGDNCNYDGYTNSIYSITIGAI DHKDLHPPYSEGCSAVMAVITYSSGSEYIH
SSDINGRCSNSHGGTSAAPLAAGVYTLLEANPNLTWRDVQYLSILSAVGL
EKNADGDWRDSAMGKKYSHRYGFGKIDAHKLIEMSKTWENVNAQTWFYLP
YVSQSTNSTEETLESVITISEKSLQDANFKRIEHVTVTVTDIDTEIRGTTVD
LISFAGIISNLGVVPRDVSSEGFKDWTFMSVAHWGENGVDWKIKVKTTEN
GHRIDFHSWRLKLFGESIDSSKTETVFVFGNDKEEVEPAATESTVSQYSASST
SISISATSTSSISIGVETSAIPQTTTASTDPDSDPNT

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Database References

Protein RefSeq:	NP_014161.1
Uniprot ID:	P13134
mRNA RefSeq:	NM_001183076.1

Product Specifications

Expressed in	Insect cells
Purity	> 95% by SDS-PAGE & HPLC analyses
Endotoxin level	< 0.1 ng/µg of protein (<1EU/µg).
Formulation	Lyophilized from 10mM Sodium Acetate, pH 6.0 + 5mM Calcium Chloride
Length (aa):	558
MW:	60.4 kDa

Stability: The lyophilized protein is stable at room temperature for 1 month and at 4°C for 6 months. Reconstituted working aliquots are stable for 1 week at 2°C to 8°C and for 12 months at -20°C to -80°C.

Reconstitution: Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. *Do not vortex.* This solution can be stored at 2-8°C for up to 1 week. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.



AVOID REPEATED FREEZE AND THAW CYCLES!

Biological Activity: Recombinant Kex-2 from High-5 insect cells contains the same specific activity and recognition sequence specificity as yeast derived KEX-2. 1 milligram of recombinant KEX-2 contains activity equivalent to at least 40 units of yeast derived KEX-2. *Cleaves at the carboxyl side of K/R-R.*