

PRODUCT DATA SHEET



Furin (human, recombinant)
(EC 3.4.21.75)

CATALOG NO.: SE-536

LOT NO.: Temp

DESCRIPTION: MW 57 kDa by SDS-PAGE. Active soluble (truncated at amino acid 595¹) furin (PACE, SPC1, PCSK3)². Furin is a proprotein convertase³ with many targets, such as insulin proreceptor¹ and other pro-hormones and growth factors⁴, proMMPs⁴, plasma pro-factors⁴, and viral and bacterial proteins^{4,5}. Furin is implicated in diseases such as cancer, infection, and arthritis³⁻⁷.

SPECIFIC ACTIVITY: 2000 U/ml. One unit will hydrolyze 1 pmol BOC-RVRR-AMC (100 µM) (Cat. # P-143) per minute at 30°C in 100 µl 100 mM HEPES pH 7.5, 0.5% Triton X-100, 1 mM CaCl₂, and 1 mM β-mercaptoethanol.

USAGE: Study enzyme kinetics, cleave target substrates, and screen for inhibitors^{2,5}.

SUPPLIED AS: 50 units human soluble furin at 2000 U/ml in 10 mM MES pH 7.0, 1 mM CaCl₂, and 50% glycerol.

STORAGE: -20 or -80°C. The enzyme is stable on ice for several hours. However, it is recommended that thawing and dilution of the enzyme be done within as short a time as possible before start of the assay. After initial defrost, aliquot product into individual tubes and refreeze. Avoid repeated freeze/defrost cycles.

NOTE: When stored under the above conditions, this enzyme is stable at the concentration supplied, in its current storage buffer. Procedures such as dilution of the enzyme followed by refreezing could lead to loss of activity.

REFERENCES:

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4. K. Nakayama *Biochem. J.* 1997 **327** 625
5. S.A. Shiryaev *et al. J. Biol. Chem.* 2007 **282** 20847
6. D.E. Bassi *et al. Am. J. Pathol.* 2003 **162** 439
7. J.M. Milner *et al. Arthritis Rheum.* 2003 **48** 1057

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