



277PR

G-Biosciences ♦ 1-800-628-7730 ♦ 1-314-991-6034 ♦ technical@GBiosciences.com

A Geno Technology, Inc. (USA) brand name

SG-Lysine-C™

(Cat. # 786-14)



think proteins! think G-Biosciences www.GBiosciences.com

INTRODUCTION

SG-Lysine-C™ endopeptidase from *Lysobacter enzymogenes* is a sequencing grade serine protease, highly specific in cleaving peptide bonds at the carboxy side of lysine.

SG-Lysine-C™ has been modified chemically by a propriety process to render the enzyme resistant to autolysis and stabilize enzymatic activity. The modified enzyme retains 70-90% of its activity after 6 hours incubation at 30°C in reaction buffer and 65-80% of activity after 24 hours incubation under the same conditions. The chemically modified SG-Lysine-C™ is stable in denaturing agents (see Table) and therefore can be used to digest difficult to solubilize proteins.

Denaturing Agent	Concentration	% Enzyme Activity Retained
Control	-	100
Urea	0.50M	100
	1.00M	100
	2.00M	100
Guanidine.HCl	0.10M	100
	0.25M	80
	0.50M	30

ITEM(S) SUPPLIED (Cat. # 786-14)

Description	Size
SG-Lysine-C™	1 vial, 20µg/vial
LYS Digestion Buffer	2ml

STORAGE CONDITIONS

It is shipped at ambient temperature. Upon arrival, store at 2-8°C and is stable for 1 year.

PREPARATION BEFORE USE

NOTE: SG-Lysine-C™ is supplied lyophilized, 20µg/vial.

Reconstitute the enzyme with 80µl LYS Digestion buffer to produce a concentration of 0.25µg/µl. Reconstituted enzyme is stable for 1 month at -70°C, repeated freeze thawing is not recommended.

PROTOCOL

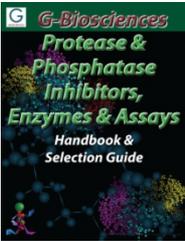
For optimal digestion make sure protein sample is either prepared or equilibrated in 50mM Tris-HCl, pH8.0.

1. For protein fragmentation, SG-Lysine-C™ is typically added to the protein at a ratio of 1:100 to 1:20 enzyme to protein, by weight.
2. The incubation is allowed to proceed at 25-30°C for 1-10 hours, but can be extended to 24 hours in some applications.

NOTE: An optimum time for incubation can be obtained by adjusting the enzyme to sample ratio, taking into consideration that Lysine-C digestion activity is typically only 40% that of trypsin.

RELATED PRODUCTS

Download our Protease & Phosphatase Inhibitors, Enzyme & Assays Handbook.



<http://info.gbiosciences.com/protease-phosphatase-inhibitors-enzymes-assay-handbook>

For other related products, visit our website at www.GBiosciences.com or contact us.

Last saved: 11/22/2017 IA



www.GBiosciences.com