

## Product Data Sheet

Product Name: Lamin fragment  
 Cat. No.: GP10016

### Chemical Properties

Cas. No.

SMILES NC(CCCCN)C(NC(C)C(NCC(NC(CCC(N)=O)C(NC(C(C)C)C(NC(C(C)C)C(NC(C(C)O)C(NC(C(C)CC)C(NC(CC1=CNC2=C1C=CC=C2)C(O)=C

Formula C<sub>47</sub>H<sub>76</sub>N<sub>12</sub>O<sub>12</sub>

M.Wt 1001.18

Solubility ≥ 100.1mg/mL in DMSO

Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure

### Background

Lamin fragment has a peptide sequence of Lys-Ala-Gly-Gln-Val-Val-Thr-Ile-Trp.

The lamins are type V intermediate filaments which can be categorized as either A-type (lamin A, C) or B-type (lamin B<sub>1</sub>, B<sub>2</sub>) according to homology in sequence, biochemical properties and cellular localization during the cell cycle. Lamin polypeptides have an almost complete  $\alpha$ -helical conformation with multiple  $\alpha$ -helical domains separated by non- $\alpha$ -helical linkers that are highly conserved in length and amino acid sequence.

Nuclear lamins are intermediate filament-type proteins that are the major building blocks of the nuclear lamina, a fibrous proteinaceous meshwork underlying the inner nuclear membrane. Lamins can also be localized in the nuclear interior, in a diffuse or spotted pattern. Lamins also play roles in DNA replication, chromatin organization, spatial arrangement of nuclear pore complexes, nuclear growth, and anchorage of nuclear envelope proteins.

### References:

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4. Geoffrey M. Cooper, Robert E. Hausman. The Cell, A Molecular Approach (4th edition). Sinauer Associates 356-360
5. Goldman et al.(2002). "Nuclear lamins: building blocks of nuclear architecture". Genes and Development 16,533-547
6. Joanna M. Bridger, Nicole Foeger, Ian R. Kill, Harald Herrmann (2007). The Nuclear Lamina: both a structural framework and a platform for genome organization. FEBS Journal 274, 1354-1361
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9. Yozef Gruenbaum, Katherine L. Wilson, Amnon Harel, Michal Goldberg, Merav Cohen (2000). Nuclear Lamins - Structural Proteins with fundamental functions. Journal of Structural Biology 129, 313-323

**Caution: Product has not been fully validated for medical applications. For research use only.**

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