Who we are

At **Biopionee**r, we offer novel protease inhibitor for isolation of different proteins from the cell line, plant, microbes, tissue, nematodes etc. and impacts on the quality protein for better R&D outcome.

Products

NexGen HM Protease Inhibitors

NexGen HM Protease inhibitor is sufficient for the inhibition of proteolytic activity. It has the efficiency to inhibit a wide range of protease families such as serine, cysteine, metalloproteases, aspartic, and mixed protease, etc. It is well suited for the protection of proteins.

NexGen HM Proteinase K Inhibitors

Proteinase K is a 28.93kDa endopeptidase of the serine protease family and is called so because of its ability to hydrolyze keratin. It is a highly active enzyme which is active under a wide range of buffers and pH (7.5 - 12). To reduce its activity, **Biopioneer** offer novel proteinase K inhibitor for R&D outcome.

Supported by

DBT-BIRAC under Biotechnology Ignition Grant

Startup Odisha under Product Development Grant



www.biopioneer.in



USPs



Thermally Stable



98% efficiency to proteinase K inhibition



Water soluble materials (100%)



Negligible toxicity



Zero cost cold condition transport



Low competitive pricing (<5-10 times)



EDTA Free



pH Stability



No interference in fluorescence based quantification of protein



Compatible with Buffer & Surfactant







Analysis

NexGen HM Protease Inhibitors



3SA + Pepsin + NexGen HM BSA + Pepsin

Ladder

Blank

BSA

BSA + CB + NexGen HM 0.1µl BSA + CB + NexGen HM IµI 3SA + Cathepsin B

BSA+ PE+ NexGen HM 20µl

3SA+ PE+ NexGenHM10 8µl BSA+ PE+ NexGenHMl0µl

3SA + Trypsin + NexGen HM

Trypsin + NexGen HM

BSA + Chymotrypsin

BSA + Chymotrypsin +

NexGen HM

Ladder BSA

Pepsin

Cathepsin B

Pronase E

BSA+ Pronase E

Ladder

Trypsin

Ladder

BSA

Chymotrypsin

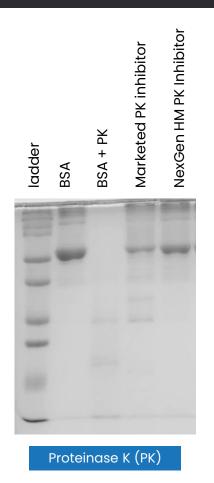
Only Cell lysate NexGen HM PI Marketed PI 2 Marketed PI 3 Marketed PI Ladder

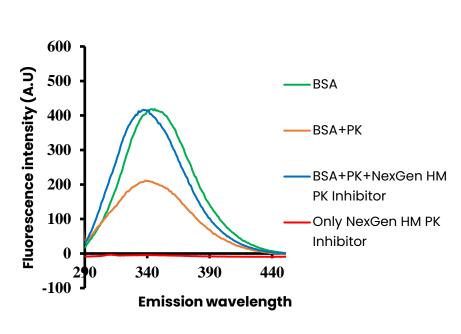
30 Protein Concentration µg/ml 25 20 15 10 5 0 Only Cell NexGen HM Marketed PI Marketed PI Marketed PI Marketed PI lysete **Protease** 3 without PI inhibitor **Different Protease Inhibitor**

Analysis

NexGen HM Proteinase K Inhibitors

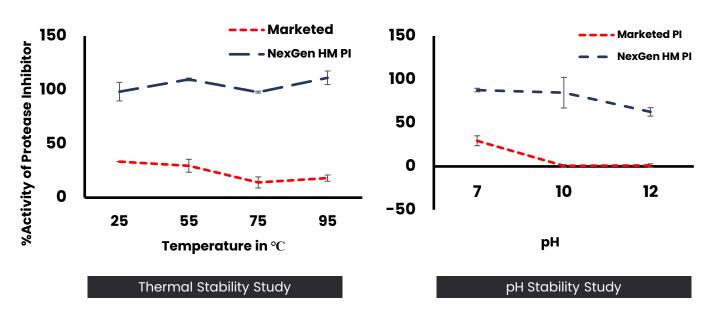




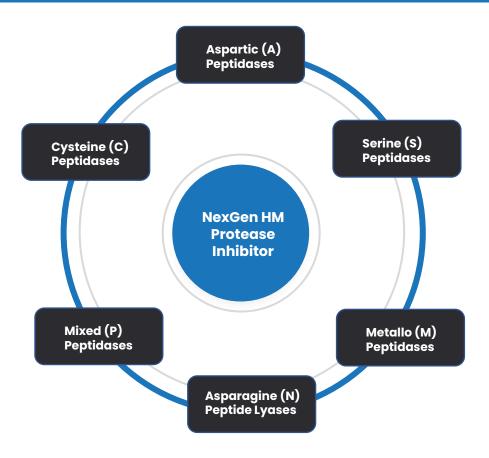


Fluorescence spectroscopy based study for PK inhibition

pH and thermal Stability study of NexGen HM Proteinase K inhibitor



Target Protease Family



Team Members

Founder



Dr. Bijayananda Panigrahi Exp 8 years in Biotechnology

Business Advisor



Dr. Mrutyunjay Suar Exp 20 years in *Biotech Business*

Research Advisor



Dr. Amol Ratnakar Suryawanshi Exp 10 years in *Clinical Proteomics*

Research Team



Dr. Dindyal Mandal Exp 20 years in *Organic Chemistry*



Dr. Rohit K SinghExp 5 years in *Biomaterials Science*



Ms. Swati Kumari Exp 2 years in *Biotechnology*

Reach Us