

Technical Datasheet

Product Name: NexGen HM Protease Inhibitor for Mammalian Cell Lysate

Catalogue Number: BPBOI008

Concentration: 50X

Introduction:

NexGen HM Protease Inhibitor for Mammalian Cell Lysate is a premium inhibitor formulated to prevent proteolytic degradation during the lysis of mammalian cells. It's providing broad-spectrum inhibition of serine, cysteine, metalloproteases, aspartic, glutamic & threonine classes of protease enzyme ensuring the preservation of protein integrity during cell lysis. It is an essential reagent for researchers conducting proteomic studies, immunoprecipitation, Western blotting, and other protein-based assays where the integrity of the protein sample is critical.

Product Description:

NexGen HM Protease Inhibitor is specifically optimized for use with mammalian cell lysates. This potent inhibitor is designed to provide comprehensive protection against a wide array of proteases that can compromise protein integrity during the lysis and extraction processes. Supplied as a concentrated, ready-to-use solution, it is compatible with various lysis buffers commonly used in mammalian cell lysis, such as RIPA and NP-40, ensuring maximum protection and stability of protein samples.

Applications:

BioPioneer's NexGen HM Protease Inhibitor for Mammalian Cell Lysate is ideal for:

- **Protein Extraction:** Prevents proteolytic degradation during the extraction of proteins from mammalian cells, preserving their native conformation and activity.
- **Western Blotting:** Ensures accurate protein detection by protecting against protease activity during sample preparation.
- **Immunoprecipitation:** Maintains the integrity of protein complexes during immunoprecipitation and co-immunoprecipitation assays.
- **Enzyme Assays:** Provides stable conditions for enzyme activity assays by inhibiting endogenous proteases from mammalian cells.

Composition:

NexGen HM Protease Inhibitor is a proprietary blend of serine, cysteine, and metalloprotease inhibitors, optimized for mammalian cell lysates. It is provided as a 50X concentrated solution, which should be diluted to 1X in the lysis buffer or sample solution immediately prior to use. The inhibitor cocktail is fully compatible with commonly used buffers such as RIPA, NP-40, and Triton X-100.

Preparation Instructions:

To use, dilute the NexGen HM Protease Inhibitor 1:50 in your lysis buffer or sample solution just before cell lysis. Mix thoroughly to ensure uniform distribution of the inhibitor throughout the sample, thereby ensuring comprehensive protease inhibition.

Storage Conditions:

Campus-11, Room No.-107, KIIT-TBI, KIIT-DU, Patia, Bhubaneswar, Odisha 751024 - India

Store NexGen HM Protease Inhibitor for Mammalian Cell Lysate at room temperature(15-20°C). Proper storage and handling will maintain the inhibitor's stability and effectiveness.

Warning and Precautions:

Not intended for medicinal use. Review the Safety Data Sheet (SDS) thoroughly before starting the protocol. Always wear protective gloves, clothing, eye protection, and face protection. Handle tissue samples and cell lysates with care to avoid cross-contamination. Adhere to good clinical laboratory practices when handling clinical samples, and follow standard precautions as outlined in established guidelines. For detailed safety procedures, consult the product's Safety Data Sheet.

Safety Information:

The NexGen HM Protease Inhibitor for Mammalian Cell Lysate is intended solely for laboratory applications and should not be used for pharmaceuticals, household purposes, or other non-laboratory uses. The Inhibitor contains components that may be hazardous if mishandled. Always observe proper laboratory safety protocols, including wearing gloves and safety goggles when handling the buffer. For details on hazards and safe handling procedures, please consult the Safety Data Sheet (SDS).

Technical Assistance:

At BioPioneer, we are committed to providing top-notch technical support and ensuring its accessibility. For any technical assistance, please email us at qc@biopioneer.in.