

Technical Datasheet

Product Name: NexGen HM Protease Inhibitor for Tissue Lysate

Catalogue Number: BPBOI009

Concentration: 50X

Introduction:

NexGen HM Protease Inhibitor for Tissue Lysate is a highly potent inhibitor designed to protect proteins from proteolytic degradation during tissue lysis. This inhibitor mix is optimized for use in tissue lysates, providing broad-spectrum inhibition of serine, cysteine, and metalloproteases. The NexGen HM Protease Inhibitor ensures the integrity of proteins throughout the extraction and purification processes, making it an essential tool for reliable protein analysis and downstream applications.

Product Description:

NexGen HM Protease Inhibitor for Tissue Lysate is a comprehensive blend of inhibitors that target a wide range of proteases commonly found in tissue lysates. The inhibitor is formulated to maintain protein stability by preventing proteolysis during sample preparation. Available as a ready-to-use solution, it is compatible with a variety of lysis buffers and is especially effective when combined with detergents and chaotropic agents, ensuring maximal protection of protein samples.

Applications:

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

- **Protein Extraction:** Protects proteins from degradation during the extraction from tissue samples, preserving their native structure and function.
- **Western Blotting:** Ensures accurate detection of proteins by preventing proteolytic degradation during sample preparation.
- **Immunoprecipitation:** Maintains the integrity of protein complexes during immunoprecipitation assays.
- **Enzyme Assays:** Provides stable conditions for enzyme activity assays by inhibiting endogenous proteases.

Composition:

NexGen HM Protease Inhibitor for Tissue Lysate is a proprietary mix of serine, cysteine, and metalloprotease inhibitors. It is provided as a 50X concentrated solution that should be diluted to 1X in the lysis buffer or sample solution immediately before use. The cocktail is compatible with RIPA, NP-40, and other commonly used lysis buffers.

Preparation Instructions:

To use, dilute the NexGen HM Protease Inhibitor 1:50 in your lysis buffer or sample solution just before tissue homogenization. For optimal results, ensure thorough mixing to achieve uniform inhibition of proteases throughout the sample.

Storage Conditions:

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

Store NexGen HM Protease Inhibitor for Tissue Lysate at room temperature (15-20°C). The inhibitor remains stable and effective when stored and handled under these conditions.

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:

NexGen HM Protease Inhibitor for Tissue Lysate is intended solely for laboratory applications and should not be used for pharmaceuticals, household purposes, or other non-laboratory uses. NexGen HM Protease Inhibitor contains components that may be harmful 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.