Protease Inhibitor Cocktail (EDTA-Free,100X in DMSO)

Product description

Endogenous proteins are produced and degraded in equilibrium and therefore their cellular level is stable under stable environmental conditions. Crude cell extracts contain many endogenous enzymes capable of degrading proteins in the extract, such as phosphatases and proteases. When proteins are extracted from cells and tissues in vitro, protein production is significantly inhibited and degradation increases. The best way to increase intact protein production is to add inhibitors of those enzymes that are known to be present. The protease inhibitor cocktail is used in cell lysates or tissue extracts to improve protein stability.

The broad specificity of this Cocktail makes it a versatile protease inhibitor mix and is suitable for purification of histidine-tagged proteins. The protease inhibitor cocktail contains several important components, including AEBSF, Aprotinin, Bestatin, E-64, Leupeptin, Phosphoramidon, and Pepstatin A, which are broadly specific for serine, cysteine, acid proteases, aminopeptidases, and metalloproteases. The product is provided as a DMSO ready-to-use solution and can be used for Western Blot, Co-IP, pull-down, IF, IHC, Kinase assay and other experiments.

Components and storage conditions

Catalog No.	Product Name	Summary	Targets	CAS Number	Smiles
A2573	AEBSF.HCl	Serine protease inhibitor	Proteases|Serine Protease	30827-99-7	C1=CC(=CC=C1CCN)S(=O)(=O)F.Cl
A2574	Aprotinin	Inhibitor of bovine pancreatic trypsin	Proteases|Serine Protease	9087-70-1	
A2575	Bestatin	Aminopeptidase inhibitor	Proteases|Aminopeptidase	58970-76-6	CC(C)CC(C(=O)O)NC(=O)C(C(CC1=CC=CC=C1)N)O
A2576	E-64	Cysteine protease inhibitor,irreversible	Proteases|Cathepsin	66701-25-5	CC(C)CC(C(=O)NCCCCN=C(N)N)NC(=O)C1C(O1)C(=O)O

A2570	Leupeptin	Inhibitor of serine and cysteine proteases	Proteases|Serine Protease	103476-89-7	O=C(C(C([H])([H])C(C([H])([H])[H])([H])C([H])([H])[H])([H])N([H])C(C([H])([H])[H])=O)N([H])C(C(N([H])C(C([H])=O)([H])C([H])([H])C([H])([H])C([H])([H])[H])/N=C(N([H])[H])/N([H])[H])=O)([H])C([H])([H])C(C([H])([H])[H])([H])C([H])([H])[H]
A2571	Pepstatin A	Aspartic protease inhibitor	Proteases|Other Proteases	26305-03-3	CC(C)CC(C(CC(=O)O)O)NC(=O)C(C)NC(=O)CC(C(CC(C)C)NC(=O)C(C(C)C)NC(=O)C(C(C)C)NC(=O)CC(C)C)O
B4790	Phosphoramidon Disodium Salt	Metalloprotease inhibitor	Proteases | Metalloprotease	164204-38-0	O=C([O-])[C@@H](NC([C@@H](NP(O[C@@H]1O[C@@H](C)[C@H](O)[C@@H](O)[C@H]1O)([O-])=O)CC(C)C)=O)CC2=CNC3=C2C=CC=C3.[Na+].[Na+]
Stored at -20°C for 12 months.					

Protocol

Thaw at room temperature and then add Protease Inhibitor Cocktail to a solution sample (e.g., cell lysate or tissue extract) at 1:100 (v/v) before the experiment.

Notes

1. The protease inhibitors contained in this product are harmful to the human body, and attention should be paid to avoid direct contact with the human body during experimental operations.
2. After receiving this product, it can be appropriately aliquoted and stored at -20 °C to avoid repeated freeze-thaw, and added to the lysate when it is taken out when used.
3. The protease inhibitor mixture and lysate are mixed and the next experiment is carried out as soon as possible, and it is not suitable to prepare and freeze for subsequent use.
4. This product is for scientific use only.

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