

Protease Inhibitor Cocktail (MS-SAFE, 50X in DMSO)

Product description

Crude cell extracts contain many endogenous enzymes capable of degrading the 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 a cocktail of inhibitors of those enzymes known to be present for broad-spectrum inhibition of proteases.

This protease inhibitor cocktail contains components such as Aprotinin, Bestatin, E-64, Leupeptin with broad specificity for cysteine, serine, acid protease and aminopeptidase. This product does not contain AEBSF to avoid interfering with mass spectrometry (MS) analysis due to mass peak drift caused by AEBSF, so protein samples extracted with this product are compatible with mass spectrometry detection. The product is available as a DMSO ready-to-use solution and is additionally available separately with EDTA for selective use.

Components and storage conditions

Tube	Catalog No.	Product Name	Summary	Targets	CAS Number	Smiles
A (50X in DMSO)	A2574	Aprotinin	Bovine trypsin inhibitors	Proteases Serine Protease	9087-70-1	
	A2575	Bestatin	Aminopeptidase inhibitors	Proteases Aminopeptidase	58970-76-6	<chem>CC(C)CC(C(=O)O)NC(=O)C(CC1=CC=CC=C1)N)O</chem>
	A2576	E-64	Cysteine protease inhibitors	Proteases Cathepsin	66701-25-5	<chem>CC(C)CC(C(=O)NCCCCN=C(N)N)NC(=O)C1C(O1)C(=O)O</chem>
	A2570	Leupeptin	Serine and cysteine protease inhibitors	Proteases Serine Protease	103476-89-7	<chem>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])/N=C(N([H])[H])/N([H])[H])=O)(</chem>

						[H])C([H])([H])C(C([H])([H])([H]))([H])C([H])([H])([H])
B (50X in ddH ₂ O)		EDTA, disodium salt, dihydrate	Metalloproteinase inhibitors	Proteases Metalloprotease	6381-92-6	
Store at -20 °C for one year.						

How to use

1. Thaw at room temperature and then add Protease Inhibitor Cocktail to a solution sample (e.g., cell lysate or tissue extract) at 1:50 (v/v) before the experiment.
2. According to the experimental needs, additional packages of EDTA (concentration 0.05 M) can also be added to the tissue lysate in a ratio of 1:50 (v/v).

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. After mixing the protease inhibitor mixture and lysate, proceed to the next step of the experiment as soon as possible, and it is not suitable to prepare and freeze for subsequent use.
4. This product is for scientific purposes only.



APEx BIO Technology
www.apexbt.com
 7505 Fannin street, Suite 410, Houston, TX 77054.
 Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: info@apexbt.com

