

★ Storage

Store at -20°C for the long term storage. Stable at -20°C for 24 months.
Xpert Duo Inhibitor Cocktail Solution(100X) is stable at 4°C for 6 months.

✈ Contents

- Product Manual
- Xpert Duo Inhibitor Cocktail Solution(100X)

ALL PRODUCTS SOLD BY GenDEPOT ARE INTENDED FOR RESEARCH USE ONLY UNLESS OTHERWISE INDICATED. THIS PRODUCT IS NOT INTENDED FOR DIAGNOSTIC OR DRUG PURPOSE

★ Introduction

Xpert Duo Inhibitor Cocktail Solution is specifically optimized to protect proteins from degradation during extraction and purification. The cocktail contains inhibitors against the major classes of proteases and phosphatases, targeting aminopeptidases, cysteine and serine proteases and serine/threonine and protein tyrosine phosphatase.

★ Ingredients and Target

The Xpert Duo Inhibitor Cocktail Solution(100X) contains a mixture of several potent inhibitors (Table 1) against the major classes of endogenous proteases and phosphatases.

Table 1. Protease and phosphatase inhibitors included in the cocktail.

Inhibitor	Target
Aprotinin	Serine Proteases
Bestatin	Aminopeptidase Proteases
E-64	Cysteine Proteases
Leupeptin	Serine and Cysteine Proteases
Sodium Fluoride	Serine and Threonine Phosphatases
Sodium Orthovanadate	Tyrosine Phosphatases
Sodium Pyrophosphate	Serine and Threonine Phosphatases
β-glycerophosphate	Serine and Threonine Phosphatases

★ Equipments and Reagents to Be Supplied by User

- Xpert Duo Inhibitor Cocktail is generally effective when used at a 1X final concentration; however, samples that contain high levels of proteases or phosphatases might require a more concentrated treatment (i.e., 2-3X).

- Pepstatin A is not included in the cocktail formulation. If you need to inhibit acid proteases, add it to the cocktail.

★ Protocol

1. Warm the Xpert Duo Inhibitor Cocktail Solution(100X) to room temperature.
2. Vortex the tube to ensure a homogeneous suspension.
3. Just before use, add 10 ul of Xpert Duo Inhibitor Cocktail Solution(100X) per 1 ml of extraction buffer to produce a 1x final concentration.

Optional : For inhibition of acid proteases, add 2-10 ul of 1m M Pepstatin A per 1 ml of extraction buffer to produce a final concentration of 2-10uM.

★ Trouble Shooting

Problem	Possible Causes	Solution
Poor inhibition of protease or phosphatase activity	Sample contains high levels of proteases or phosphatases	Add sufficient cocktail to produce a 2X or 3X final concentration.
Cocktail does not provide sufficient protection against a particular protease family	Inhibitor for a specific family is not a component of the cocktail	Add individual inhibitors to the samples for the specific protease

★ Related Products

Product Name	Cat No
Albumin, (IgG, Fattu Acid and Protease Free)	A0100
AffiSelect Cox IV Loading Control Antibody	A0017
AffiSelect GAPDH Loading Control Antibody, 100ug	A0039
AffiSelect Beta-Actin Loading Control Antibody, 100ug	A0042
AffiSelect a-Tubulin Loading Control Antibody, 100ug	A0050
NP-40 Lysis Buffer (2X)	N1200
Affiselect Total Protein Extraction Solution	A0710
RIPA Cell Lysis Buffer (1X) with EDTA	R4100
Xpert Phosphatase Inhibitor Cocktail Solution (100X)	P3200
Xpert Prestained Protein Marker (6.5-240 kDa)	P8502
Xpert 2 Prestained Protein Marker (10-240 kDa)	P8503
Goat anti-Mouse IgG(H+L)-HRP, 1mg/ml	SA001
Goat anti-Rabbit IgG(H+L)-HRP, 200ug/0.5ml	SA002
Rabbit anti-Goat IgG(H+L)-HRP, 200ug/0.5ml	SA007
West-Q Pico Dura ECL Solution	W3653
West-Q Femto ECL Solution	W3700