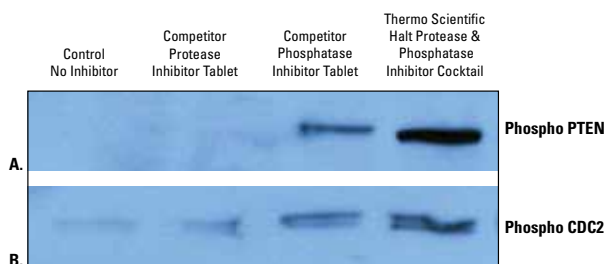


### Halt protease and phosphatase inhibitor cocktails, Thermo Scientific Pierce

**Thermo**  
SCIENTIFIC

**NEW** PN



**Thermo Scientific Halt Protease and Phosphatase Inhibitor Cocktail preserves phosphorylation of phosphorylated PTEN and CDC2 in HeLa cell lysate more effectively than tablet-format phosphatase inhibitor cocktail.** HeLa cells were serum starved for 24hr. Serum-containing media was added to the cells for 15min and cells were lysed with Thermo Scientific M-PER<sup>®</sup> Mammalian Protein Extraction Reagent in the presence or absence of 1X inhibitor cocktail. Tablets were dissolved in 1mL of buffer and then diluted 1:100 into the lysis reagent. The Halt Protease and Phosphatase Inhibitor Cocktail was added directly to the lysis reagent. Lysates were analysed by Western blot for preservation of protein phosphorylation using the antibodies indicated. Panel A. Phosphorylated PTEN, Panel B. Phosphorylated CDC2. The antibodies recognise phosphorylation on serine and tyrosine, respectively.

Complete protection from proteases and phosphatases in one reliable cocktail. This broad spectrum inhibitor cocktail is specifically optimised to protect proteins from degradation during extraction and purification.

- Immediate inhibition – no need to thaw, open multiple tubes or wait for tablets to dissolve
- Compatible with Thermo Scientific Pierce cell lysis buffers
- MS-compatible because it does not contain AEBSF which can cause peaks to shift

The cocktail contains inhibitors against the major classes of proteases and phosphatases. To promote the inhibition of metalloproteases 0.5M EDTA is provided in a separate tube.

Inhibitor	Target
Sodium fluoride	Ser/Thr and acidic phosphatases
Sodium orthovanadate	Tyr and alkaline phosphatases
$\beta$ -glycerophosphate	Ser/Thr phosphatases
Sodium pyrophosphate	Ser/Thr phosphatases
Aprotinin	Ser proteases
Bestatin	Amino-peptidases
E64	Cysteine proteases
Leupeptin	Ser/Cys proteases
EDTA (optional)	Metalloproteases

Catalogue No	Description	Quantity
<b>PN78440</b>	Halt protease and phosphatase inhibitor cocktail (100X)	1mL
<b>PN78441</b>	Halt protease and phosphatase inhibitor cocktail, EDTA-free (100X)	1mL
<b>PN78442</b>	Halt protease and phosphatase single-use inhibitor cocktail (100X)	24 x 100 $\mu$ L
<b>PN78443</b>	Halt protease and phosphatase inhibitor single-use cocktail, EDTA-free (100X)	24 x 100 $\mu$ L
<b>PN78444</b>	Halt protease and phosphatase inhibitor cocktail (100X)	5 x 1mL
<b>PN78445</b>	Halt protease and phosphatase inhibitor cocktail, EDTA-free (100X)	5 x 1mL
<b>PN78446</b>	Halt protease and phosphatase inhibitor cocktail (100X)	10mL
<b>PN78447</b>	Halt protease and phosphatase inhibitor cocktail, EDTA-free (100X)	10mL

### AEBSF hydrochloride $\geq 98\%$ white to off-white, (4-(2-Aminoethyl)-benzenesulfonyl fluoride HCl)

**F**  
Fisher BioReagents<sup>®</sup>

This specific, irreversible inhibitor of serine proteases is a stable, nontoxic alternative to PMSF.

32

Catalogue No	Quantity
<b>BPE635-50</b>	50mg
<b>BPE635-100</b>	100mg
<b>BPE635-500</b>	500mg

$C_8H_{10}FNO_2S.HCl$

M.W. 239.70

### AEBSF hydrochloride $\geq 97\%$ white powder, (4-(2 Aminoethyl) benzene sulfonyl fluoride hydrochloride)

**F**  
Fisher BioReagents<sup>®</sup>

4-(2-Aminoethyl)benzenesulfonyl fluoride hydrochloride is a covalent binding serine protease inhibitor.

**NEW** 32

Catalogue No	Quantity
<b>BPE2644-100</b>	100mg
<b>BPE2644-1</b>	1g

$C_8H_{10}FNO_2S.HCl$

M.W. 239.7

### Benzamidine hydrochloride hydrate white crystalline powder, (Benzamidine chloride)

**F**  
Fisher BioReagents<sup>®</sup>

Benzamidine hydrochloride is commonly used as a protease inhibitor.

32

Catalogue No	Quantity
<b>BPE435-25</b>	25g
<b>BPE435-1</b>	1kg

$C_8H_{10}N_4.HCl.xH_2O$

M.W. 156.61

#### Product specification

Assay	$\geq 99.0\%$
Solubility (1% in $H_2O$ at room temp.)	Clear and haze-free
Lambda max. ( $\lambda$ ) (in methanol)	230nm $\pm$ 5nm
Heavy metals (as Pb)	$\leq 0.005\%$
Water (internal)	$\leq 15\%$

### Leupeptin hemisulfate white powder, (Acetyl-Leu-Leu-Arg-al or Valeramide)

**F**  
Fisher BioReagents<sup>®</sup>

Leupeptin hemisulfate is a biochemical used as an inhibitor for trypsin, plasmin, papain, and cathepsin B.

**NEW** 32

Catalogue No	Quantity
<b>BPE2662-1</b>	1mg
<b>BPE2662-5</b>	5mg
<b>BPE2662-25</b>	25mg
<b>BPE2662-100</b>	100mg

$C_{28}H_{44}N_{10}O_{11}.1/2H_2SO_4$

M.W. 475.60

### Phenylmethylsulfonyl fluoride ( $\alpha$ -Toluenesulfonyl fluoride, PMSF)

**F**

Serine-protease inhibitor. Less hazardous than diisopropyl fluorophosphate.

28

Catalogue No	Quantity
<b>P/2805/44</b>	5g

$C_8H_9CH_3SO_2F$

M.W. 174.19