## Calbiochem<sup>®</sup>

# Protease and Phosphatase Inhibitor Cocktails,

choose from the widest range of cocktails to compliment your sample

### Key features:

• Convenient: Ready-To-Use formulations

• Consistent: High quality ensures reproducible performance

• Flexible: Sets of cocktails designed to target a range of proteases & phosphatases

## www.merckbio.eu/InhibitorCocktails

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| Country   | Orders  | Technical Support   | Country  | Orders   | Technical Support  |  |
| Austria<br>Belgium<br>Denmark<br>Finland<br>France<br>Germany<br>Ireland<br>Italy | 00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>0800 0166 8811<br>0800 699 620<br>0800 6931 000<br>1800 409 445<br>00800 1166 8811 | 00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>0800 1166 8811<br>0800 126 461<br>0800 100 3496<br>1800 409 445<br>00800 1166 8811 | Netherlands<br>Norway<br>Portugal<br>Spain<br>Sweden<br>Switzerland<br>UK<br>Other | 00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>0800 0166 8811<br>0800 622 935<br>+44 115 943 0840 | 00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>00800 1166 8811<br>0800 022 935<br>+44 115 943 0840 |  |
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# Protease Inhibitor Cocktails and Inhibitor Sets

Protease inhibitor cocktails and highly specific inhibitors of proteases are important tools for scientists engaged in a variety of proteomic studies including protein expression and characterization, biomarker discovery, mapping of post-translational modifications, protein expression profiling, and the quantitative measurement of proteins. The addition of a protease inhibitor cocktail or protease inhibitor ensures the integrity of proteins for downstream analysis and further characterization of samples.

### Product Spotlight

| Protease Inhibitor Cocktail Set III, EDTA-Free   | Cat. No. | Size          | GBP<br>Price £ | EURO<br>Price€ |
|--|----------|---------------|----------------|----------------|
| <ul> <li>EDTA-Free - recommended for applications requiring IMAC</li> <li>Flexible - Use with bacterial extracts. mammalian cell and tissue extracts</li> <li>Fast - no waiting for tablets to dissolve</li> </ul> | 539134   | 1 ml<br>1 set | 39<br>164      | 71<br>309      |
| - Economical - ready-to-use format reduces wastage   |          |               |                |                |

Effective – Une mLis sufficient for approximately 20 g tissue
 Complete – six protease inhibitors for the inhibition of aspartic, cysteine,

serine proteases and aminopeptidases

## Selection Guide for the Use of Specialized Protease Inhibitor Cocktails

| Product  | Cat. No. | Recommended Application   | Protease<br>Inhibitors  | Size              | GBP<br>Price £ | EURO<br>Price € |
|--|----------|---|---|-------------------|----------------|-----------------|
| Protease Inhibitor<br>Cocktail Set I                   | 539131   | General use, use 1 ml in 100 ml<br>extraction buffer  | AEBSF, Aprotinin,<br>E-64, EDTA, Leupeptin<br>Hemisulfate                                       | 1 vial<br>10 vial | 24<br>138      | 34<br>220       |
| Protease Inhibitor<br>Cocktail Set I,<br>Animal Free   | 535142   | General use, use 1 ml in 100 ml<br>extraction buffer  | AEBSF, Aprotinin,<br>E-64, EDTA, Leupeptin<br>Hemisulfate                                       | 1 ml<br>1 set     | 17<br>132      | 27<br>191       |
| Protease Inhibitor<br>Cocktail Set II                  | 539132   | Bacterial cell extracts (except those intended for metal chelation chromatography)  | AEBSF, Bestatin, E-64,<br>EDTA, Pepstatin A   | 1 set<br>5 set    | 39<br>164      | 93<br>375       |
| Protease Inhibitor<br>Cocktail Set III,<br>EDTA-Free   | 539134   | Mammalian cells and tissue extracts<br>purified using metal chelation<br>chromatography; samples to be<br>analyzed by 2-D gel electrophoresis | AEBSF, Aprotinin,<br>Bestatin, E-64,<br>Leupeptin, Pepstatin A                                  | 1 ml<br>1 set     | 39<br>164      | 71<br>309       |
| Protease Inhibitor<br>Cocktail Set III,<br>Animal-Free | 535140   | Mammalian cells and tissue extracts<br>and for applications that require the<br>use of animal-free reagents                                   | AEBSF, Aprotinin,<br>Bestatin, E-64,<br>Leupeptin, Pepstatin A                                  | 1 ml<br>1 set     | 37<br>158      | 55<br>232       |
| Protease Inhibitor<br>Cocktail Set IV                  | 539136   | Fungal and yeast cell extracts  | AEBSF, HCI, E-64,<br>Pepstatin A,<br>1,10-Phenanthroline  | 1 ml<br>1 set     | 45<br>164      | 67<br>248       |
| Protease Inhibitor<br>Cocktail Set V,<br>EDTA Free     | 539137   | Mammalian cells and tissue extracts<br>purified using metal chelation<br>chromatography; samples to be<br>analyzed by 2-D gel electrophoresis | AEBSF, HCI, Aprotinin,<br>E-64, Leupeptin<br>Hemisulfate  | 1 ml<br>10 vial   | 23<br>168      | 35<br>260       |
| Protease Inhibitor<br>Cocktail Set V,<br>Animal-Free   | 535141   | Mammalian cells and tissue extracts<br>and for applications that require the<br>use of animal-free reagents                                   | AEBSF, HCI, Aprotinin,<br>E-64, Leupeptin<br>Hemisulfate  | 1 ml<br>1 set     | 37<br>132      | 55<br>183       |
| Protease Inhibitor<br>Cocktail Set VI                  | 539133   | Plant cell extracts   | AEBSF, HCI, Bestatin,<br>E-64, Leupeptin<br>Hemisulfate,<br>Pepstatin A,<br>1,10-Phenanthroline | 1 ml<br>1 set     | 39<br>173      | 78<br>341       |
| Protease Inhibitor<br>Cocktail Set VII                 | 539138   | Proteins containing His•Tag® sequences  | AEBSF, Bestatin, E-64,<br>Pepstatin A,<br>Phosphoramidone                                       | 1 ml<br>1 set     | 39<br>173      | 78<br>341       |
| Protease Inhibitor<br>Cocktail Set VIII                | 539129   | Broad range cysteine protease inhibition  | ALLN, E-64, Cathepsin   | 1 ml<br>1 set     | 39<br>173      | 78<br>341       |
| Serine Protease<br>Inhibitor Cocktail Set I            | 565000   | Broad range serine protease inhibition  | AEBSF, HCI, Aprotinin,<br>Elastinal, GGACK  | 1 ml<br>1 set     | 38<br>154      | 75<br>298       |

# Phosphatase Inhibitor Cocktails

Phosphorylation and dephosphorylation of proteins mediate signal transduction events that control a multitude of cellular processes such as cell division, cell proliferation, apoptosis, etc. Target proteins are phosphorylated by protein kinases that transfer a phosphate group to a specific protein, typically at serine, threonine, or tyrosine residues. The covalent attachment of a phosphoryl group changes the conformation of the protein and alters its ability to interact with a ligand. The phosphate group is removed by the action of protein phosphatases, that restore the protein to its original dephosphorylated state. During the extraction of phosphorylated proteins from cell and tissue lysates, it is highly critical that the phosphorylation state of the proteins be preserved.

#### features:

- Convenient: Ready-To-Use formulations
- Consistent: High quality ensures reproducible performance
- Flexible: A set of cocktails designed to target different catagories of phosphatases

#### **Product Spotlight**

| Phosphatase Inhibitor Cocktail Set II   | Cat. No. | Size  | GBP<br>Price £ | EURO<br>Price € |
|---|----------|-------|----------------|-----------------|
| <ul> <li>Flexible - Use with cell lysates and tissue extracts, including samples containing<br/>detergents</li> <li>Economical - ready-to-use format reduces wastage</li> </ul> | 524625   | 1 set | 162            | 278             |
| - Effective - One ml is sufficient for approximately 100 ml extraction buffer   |          |       |                |                 |
| <ul> <li>Complete – five phosphatase inhibitors for the inhibition of acid and alkaline<br/>phosphatases and protein tyrosine phosphatases (PTPs).</li> </ul>                   |          |       |                |                 |

### Selection Guide for the Use of Specialized Phosphatase Inhibitor Cocktails

| Product   | Cat. No. | Recommended Application  | Phosphatase inhibitor  | Size          | GBP<br>Price £ | EURO<br>Price € |
|---|----------|--|--|---------------|----------------|-----------------|
| Phosphatase<br>Inhibitor Cocktail<br>Set II     | 524625   | Protection against acid and alkaline<br>phosphatases and Protein Tyrosine<br>Phosphatases (PTPs) | Imidazole,<br>Sodium Fluride,<br>Sodium Molybdate, Sodium<br>Orthovanadate, Sodium<br>Tartrate (Dihydrate) | 1 set         | 162            | 278             |
| Phosphatase<br>Inhibitor Cocktail<br>Set III    | 524627   | Protection against Ser/Thr<br>phosphatases and Protein Tyrosine<br>Phosphatases (PTPs)           | Sodium Fluoride,<br>Sodium Othovanadate,<br>Sodium Pyrophosphate<br>(decahydrate),<br>ß-Glycerophosphate   | 1 ml<br>1 set | 77<br>264      | 113<br>378      |
| Phosphatase<br>Inhibitor Cocktail<br>Set IV     | 524628   | Protection against alkaline<br>phosphatases and Ser/Thr<br>phosphatases such as PP1 and PP2A     | (-)- <i>p</i> -Bromotetramisole<br>oxalate,<br>Cantharidin,<br>Calyculin A, <i>Discodermia</i><br>calyx    | 1 ml<br>1 set | 50<br>190      | 73<br>279       |
| Phosphatase<br>Inhibitor Cocktail<br>Set V, 50X | 524629   |  |  | 1 ml<br>1 set | 67<br>226      | 97<br>327       |

| PhosphoSafe <sup>™</sup> Extraction Reagent   | Cat. No. | Size            | GBP<br>Price £ | EURO<br>Price€ |
|---|----------|-----------------|----------------|----------------|
| <ul> <li>Preserve the native phosphorylation state while extracting cytosolic proteins from mammalian and insect cells with PhosphoSafe Extraction Reagent: <ul> <li>Includes four phosphatase inhibitors: sodium fluoride, sodium vanadate, β-glycerophosphate, and sodium pyrophosphate</li> <li>Compatible with Western blotting, immunoprecipitation, and kinase activity assays</li> </ul> </li> </ul> | 71296    | 25 ml<br>125 ml | 54<br>218      | 85<br>344      |

If you would like to test any of these products please contact your local technical account manager: www.merckbio.eu/accountmanager

Related Literature:

Protein Purification & Detection Tools, Novagen® Catalog 2009/2010, Calbiochem® Catalog 2008/2009



Request your free copy of the new Novagen® Catalog 2009/2010 www.merckbio.eu/literature

