



PRODUCT HIGHLIGHT

CELL ISOLATION OPTIMIZING KIT

Tissue Dissociation/Cell Isolation

Worthington Biochemical Corporation offers a complete method development kit containing an assortment of enzymes most frequently used in tissue dissociation and cell isolation procedures. The "Cell Isolation Optimizing System" includes instructions, references and strategies for the handling, use and optimization of enzymatic cell isolation methods to achieve maximum yield of viable cells. The system is designed to offer versatility in developing a method of obtaining cells from many different tissue types and sources in a cost-efficient manner.

<u>Product</u>	<u>Code</u>	<u>Size</u>	<u>Cat. No.</u>	<u>Price</u>
Cell Isolation Optimizing System A complete method development kit for enzymatic primary cell isolation including enzymes and detailed instructions.	CIT	1 Kit	LK003200	\$ 425.00

Ask about our bulk quantity discounts for educational and training purposes

Description of Package and Contents

The 'System' contains all of the enzymes produced by Worthington commonly referenced in tissue dissociation and cell isolation procedures along with the Cell Isolation Guide detailing the tissue types commonly used, the mode of action of the various enzymes, tissue culture techniques, and protocol optimization guidelines. In addition the guide lists hundreds of cell and tissue specific isolation references for getting started in enzymatic cell isolation.

KIT CONTENTS

<u>Enzyme</u>	<u>Code*</u>	<u>Qty/Vial</u>
Collagenase Type 1	CLS1	500 mg dw
Collagenase Type 2	CLS2	500 mg dw
Collagenase Type 3	CLS3	500 mg dw
Collagenase Type 4	CLS4	500 mg dw
Trypsin	TL	500 mg dw
Hyaluronidase	HSE	50,000 Units
Elastase	ESL	100 mg P
Papain	PAPL	100 mg P
Deoxyribonuclease I	DP	25 mg dw
Neutral Protease(Dispase)	NPRO	10 mgdw
Trypsin Inhibitor	SIC	100 mg dw

dw = dry weight
P = protein

* The code which appears in the table for each of the enzymes corresponds to the codes found in our regular price list.

Tissue dissociation and cell harvesting are two principal applications for enzymes in tissue culture research and cell biology studies. Despite the widespread use of enzymes for these applications over the years, their mechanisms of action in dissociation and harvesting are not well understood. As a result, the choice of one technique over another is often arbitrary and based more on past experience than on an understanding of why the method works and what modifications could lead to even better results.

Researchers searching the scientific literature for information on the ideal enzymes and optimal conditions for tissue dissociation are often confronted with conflicting data. Much of the variation stems from the complex and dynamic nature of the extracellular matrix and from the historical use of relatively crude, undefined enzyme preparations for cell isolation applications. The extracellular matrix is composed of a wide variety of proteins, glycoproteins, lipids and glycolipids, all of which can differ in abundance from species to species, tissue to tissue and with developmental age. The Worthington Cell Isolation System provides an assortment of the widely used enzymes in purified form for establishing an optimized cell isolation procedure on a cost-efficient basis.

Related Products:

Collagenases
Dispase
Hepatocyte Isolation Kit
Neonatal Cardiomyocyte Isolation Kit
Papain (Neural) Dissociation Kit
Proteases

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730 Vassar Avenue, Lakewood, New Jersey 08701

800.445.9603 • 732.942.1660 • Fax: 800.368.3108 • 732.942.9270 www.worthington-biochem.com