

## Liberase DL (Research Grade)

Cat. No. NATE-1785

Lot. No. (See product label)

### Introduction

<b>Description</b>	Liberase DH Research Grade contains highly purified Collagenase I and Collagenase II. These two collagenase isoforms are blended in a precise ratio to each other, and with a high concentration of Dispase, a non-clostridial neutral protease. Liberase DL (Dispase Low) Research Grade is used for the dissociation of a broad range of tissue types, where high purity of the enzyme blend is necessary for high cell yield and viability. Bacterial by-products, such as endotoxins, are reduced up to several thousand-fold.
<b>Applications</b>	Liberase DL (Dispase Low) Research Grade has been used for the isolation of skin stem cells from mice.
<b>Synonyms</b>	Liberase DL Research Grade; Liberase DL; Liberase; low Dispase concentration

### Product Information

<b>Form</b>	Lyophilized powder
<b>Optimum pH</b>	7.4
<b>Optimum temperature</b>	35-37 °C optimum reaction temp.
<b>Stabilizers</b>	Calcium

### Usage and Packaging

<b>Reconstitution</b>	<p>Reconstitute the lyophilized enzyme with injection-quality sterile water or tissue-dissociation buffer. Do not add serum or other components that may influence enzyme activity, such as albumin or protease inhibitors, to the dissociation buffer. Enzyme stability is reduced at higher concentrations and warmer temperatures (4 °C). Avoid both the above conditions. Reconstitute the entire vial. Do not weigh individual aliquots of the lyophilizate. The introduction of moisture into the vial results in a decline in enzymatic activity. Place vial on ice to rehydrate the lyophilized enzyme. Gently agitate the vial at 2 to 8 °C until enzyme is completely dissolved (max. 30 min). Depending on the type of tissue-dissociation buffer used to dissolve Liberase Research Grade Purified Enzyme Blends, slight precipitations may be observed readily dissolve in the diluted working solution and have no influence on enzyme activity. Remove an aliquot of the stock solution to prepare the working solution.</p> <p>Reconstitution volume: 2 ml (1 vial with 5 mg–10 mg pack size) 10 ml (1 vial with 50 mg–100 mg pack size) Collagenase WÄ¼nsch (units/ml): 13 (1 vial with 5 mg–10 mg pack size) 26 (1 vial with 50 mg–100 mg pack size) Total Collagenase concentration [mg/ml]: 2.5 (1 vial with 5 mg–10 mg pack size) 5.0 (1 vial with 50 mg–100 mg pack size)</p>
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### Storage and Shipping Information

<b>Storage</b>	Store unused stock solution in single-use aliquots at -15 to -25 °C. Avoid repeated freezing and thawing!
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