# **Application Note**

# Isolation of Murine Lung Cells with Collagenase NB 4 Standard Grade

### Product Information Collagenase NB 4 Standard Grade

**Collagenase NB 4 Standard Grade** is designed for dissociation of different tissues to isolate various cell types, e.g. murine lung cells. A balanced ratio of collagenase and other proteases guarantees a high yield of viable cells.

#### **Specification**

Collagenase activity:  $\geq$ 0.1 U/mg (PZ\*) \*PZ units acc. to Wünsch

The lot-specific activity of Collagenase NB 4 Standard Grade is stated on the certificate of analysis which is attached to every delivery.

#### **Storage Conditions**

Collagenase NB 4 Standard Grade is provided as a lyophilized powder and should be stored in a dry environment at +2 to +8 °C. Stock solutions can be 0.2  $\mu$ m filtered and stored at -20°C for 1 year without loss of activity.

#### **Clinical Applications**

Collagenase NB 4 Standard Grade can be replaced by Collagenase NB 6 GMP Grade (Cat. No. N0002779) which shows comparable enzymatic properties but is produced according to GMP guidelines.

#### **Ordering Information**

Enzyme	Cat. No.	Pack size
Collagenase NB 4 Standard Grade	S1745402	500 mg
Collagenase NB 4 Standard Grade	S1745401	1 g
Collagenase NB 4 Standard Grade	S1745403	5 g

## **Isolation of Murine Lung Cells**

Recommended Starting Conditions		
Concentration of Collagenase NB 4 Standard Grade	0.2 PZ U/ml*	
Isolation conditions	1 h, 37 °C**	

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\*PZ units acc. to Wünsch

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\*\*Addition of 0.2 % dispase is recommended.

In general the required collagenase concentration depends on tissue type and origin as well as isolation procedure. Therefore, Collagenase NB concentrations stated above should be considered as starting points and progress of the digestion process should be monitored visually in order to determine the optimal conditions.

The digestion process can be stopped by adding EDTA, cooling down or diluting the digestion solution.

It is recommended to measure the concentration of the collagenase solution in PZ U/ml and not in mg/ml.

This ensures optimal reproducibility of isolations with collagenases from different lots, although Nordmark guarantees a high lot-to-lot consistency.

#### Collagenase NB products

- > High cell yields and viability
- > Reliable lot-to-lot consistency
- > GMP grades available

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