

# Application Note

## Isolation of Rodent Hepatocytes with Collagenase NB 4G Proved Grade

### Product Information Collagenase NB 4G Proved Grade

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

### Specification

Collagenase activity:  $\geq 0.18$  U/mg (PZ\*)

\*PZ units acc. to Wunsch

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

### Storage Conditions

Collagenase NB 4G Proved 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

For GMP product equivalents, please contact the NB Product Manager Team. They will find the best suitable product option for your specific application.

### Ordering Information

Enzyme	Cat. No.	Pack size
Collagenase NB 4G Proved Grade	S1746501	500 mg
Collagenase NB 4G Proved Grade	S1746502	1 g
Collagenase NB 4G Proved Grade	S1746503	5 g

For information and samples please contact the Nordmark Biochemicals Team

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### Isolation of Rodent Hepatocytes

#### Mouse

##### Recommended Starting Conditions

Concentration of Collagenase NB 4G Proved Grade	0.08 – 0.11 PZ U/ml*
Isolation conditions	5 – 15 min, 37 °C perfusion 5 – 8 ml/min

#### Rat

##### Recommended Starting Conditions

Concentration of Collagenase NB 4G Proved Grade	0.12 – 0.15 PZ U/ml*
Isolation conditions	10 – 25 min, 37 °C perfusion 5 – 8 ml/min

\*PZ units acc. to Wunsch

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**

#### Ordering

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