

Application Note

Isolation of Human Hepatocytes with Collagenase NB 6 GMP Grade

Product Information Collagenase NB 6 GMP Grade

Collagenase NB 6 GMP Grade is designed for dissociation of different tissues to isolate various cell types, e.g. human hepatocytes and stellar cells.

A balanced ratio of collagenase and other proteases guarantees a high yield of viable cells.

Specification

Collagenase activity: ≥ 0.1 U/mg (PZ*)
 Endotoxins: Status
 Sterility: Must comply

* PZ units acc. to Wunsch

Storage Conditions

Collagenase NB 6 GMP 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 µm filtered and stored at -20 °C for 1 year.

Clinical Applications

Collagenase NB 6 GMP Grade is sterile and produced acc. to GMP guidelines. Documents, e.g. TSE safety and stability studies are available on request. For research applications it can be replaced by Collagenase NB 4 Standard Grade (Cat. No. S1745401) which has comparable enzymatic properties but differs in manufacturing level.

Ordering Information

Enzyme	Cat. No.	Pack size
Collagenase NB 6 GMP Grade	N0002880	100 mg
Collagenase NB 6 GMP Grade	N0002779	1 g

Isolation of Human Hepatocytes and Hepatic Stellar Cells from Liver

Recommended Starting Conditions

Concentration of Collagenase NB 6 GMP Grade	0.25 – 0.35 PZ* U/ml
Isolation Conditions	10 – 20 min, 37 °C

*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 Biochemicals 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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