Application Note

Nordmark Biochemicals

Crescent Chemical Company

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: ≥ 0.18 U/mg (PZ*)

The activity of the 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 state at +2 to +8 °C.
Stock solutions can be filtered sterile and stored at -20 °C for 1 year without loss of activity.

Order Information

Enzyme	Cat. No.	Pack size
Collagenase NB 4G Proved Grade	17465.01	500 mg
Collagenase NB 4G Proved Grade	17465.02	1 g

*PZ units acc. to Wünsch

Isolation of rodent hepatocytes

Mouse

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

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

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 batches, although SERVA guarantees a high lot-to-lot consistency.

Nordmark Collagenase NB Qualities

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

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