

Application Note

Isolation of rodent endothelial 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. endothelial cells from rodent aorta. A balanced ratio of collagenase and other proteases guarantees a high yield of viable cells.

Specification

Collagenase activity: ≥ 0.1 U/mg (PZ*)

The activity of the Collagenase NB 4 Standard Grade is stated on the certificate of analysis which is attached to every consignment.

Storage conditions

Collagenase NB 4 Standard 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 losing activity.

Order Information

Enzyme	Cat. No.	Pack size
Collagenase NB 4 Standard Grade	17454.02	500 mg
Collagenase NB 4 Standard Grade	17454.01	1 g

*PZ units acc. to Wunsch

Isolation of endothelial cells from rodent aorta

Concentration of Collagenase NB 4 Standard Grade	0.12 – 0.15 PZ U/ml
Isolation Conditions	10 – 20 min, 37 °C

In general the required Collagenase NB concentration depends on tissue type and origin as well as isolation procedure. The above stated concentrations 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 not in mg/ml but in PZ-U/ml. This ensures optimal comparison of isolation procedures with collagenases from different batches, although SERVA guarantees a high lot-to-lot consistency.

SERVA Collagenase NB Qualities

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