

# Application Note

## Isolation of human epithelial cells 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. human epithelial cells from thyroid gland. A balanced ratio of collagenase and other proteases guarantees a high yield of viable cells.

#### Specification

Collagenase activity:  $\geq 0.18$  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 Wunsch

### Isolation of human epithelial cells from thyroid gland

|   |                    |
|---|--------------------|
| Concentration of Collagenase NB 4G Proved Grade | 0.25 – 0.3 PZ U/ml |
| Isolation conditions                            | Room temperature   |

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.

#### SERVA Collagenase NB Qualities

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