# **Application Note**



## **Isolation of Human SVF from Adipose Tissue with** Collagenase AF-1 GMP Grade & Neutral Protease AF GMP Grade

### **Isolation of Human SVF from Adipose Tissue**

Collagenase AF-1 GMP Grade and Neutral Protease AF GMP Grade are highly active enzymes and designed to isolate especially sensitive cells from tissues. Individual dosing of both products also allows for adjustment to specific applications, such as isolation of stromal vascular fraction from lipoaspirate.

Recommended Starting Conditions	
Concentration Collagenase AF-1 GMP Grade	0.2 PZ U/ ml
Concentrationu Neutral Protease AF GMP Grade	0.1 DMC U/ ml
Isolation terms	50 min, 37 °C

<sup>\*</sup> PZ units acc. to Wünsch; final concentration including lipoaspirate

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 the progress of the digestion process should be monitored visually 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 calculate 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.

#### Ordering Information

Enzyme	Cat. No.	Pack size
Collagenase AF-1 GMP Grad from <i>C. histolyticum</i>	N0003855	> 150 PZ U/ Vial
Neutral Protease AF GMP Grade from C. histolyticum	N0003553	> 100 DMC U/ Vial



#### **Specification**

#### Collagenase AF-1 GMP Grade

≥ 3.000 U/mg Collagenase ≥ 150 U/vial (PZ\*) Neutral protease  $\leq$  0.050 U/mg (DMC)

activity  $\leq$  10.0 EU/mg

Bacterial endotoxins

#### **Neutral Protease AF GMP Grade**

Neutral protease ≥ 0.50 U/mg ≥ 100 U/vial (DMC) activity ≤ 100.0 EU/mg

Bacterial endotoxins

#### **Clinical Applications**

Both products are manufactured according to GMP guidelines using a production process free of animal-based components. Thus, the introduction of any potential animal-derived pathogen is excluded by design. Documents, e.g. on TSE safety and stability studies are available on request.

### **Storage Conditions**

Both products are 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 without loss of activity.

#### Nordmark Biochemicals Enzymes

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

#### Ordering

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Chemical Company