

ISLETS OF LANGERHANS



ISOLATION OF ISLETS OF LANGERHANS WITH COLLAGENASE NB

In the following, application details for isolation of islets of Langerhans from human, rodent and porcine pancreatic tissue are presented.

Species	Enzymes	Conditions
Human*	Collagenase NB 1 Premium Grade, Neutral Protease NB	Per gram tissue: 20 PZ U (NB 1), 0.8-1.5 DMC U (NP), 15-30 min, 37 °C
Porcine (adult)	Collagenase NB 8, Neutral Protease NB	Per gram tissue: 4.4 PZ U (NB 8), 0.5-0.7 DMC U (NP), 37 °C
Porcine (neonatal)	Collagenase NB 4	0.17-0.2 PZ U/ml, 10-20 min, 37 °C
Rodent	Collagenase NB 8	1.5-1.7 PZ U/ml 14-17 min, 37 °C

Clinical Applications*

Species	Enzymes	Conditions
Human	Collagenase NB 1 GMP Grade, Neutral Protease NB GMP Grade	Per gram tissue: 20 PZ U (NB 1), 0.8-1.5 DMC U (NP), 15-30 min, 37 °C
Porcine (adult)	Collagenase NB 1 GMP Grade, Neutral Protease NB GMP Grade	Per gram tissue: 15-18 PZ U (NB 1), 0.8-1.3 DMC U (NP), 15-30 min, 37 °C
Porcine (neonatal)	Collagenase NB 6	0.17-0.2 PZ U/ml, 10-20 min, 37 °C

* For information on GMP grade Collagenase NB please [contact us!](#)

[Collagenase NB 1 Premium Grade \(cat. no. S1745504\)](#) is a highly purified collagenase with a high collagenolytic activity (≥ 3.0 PZ U/mg) and very low proteolytic side activities. It is also available as GMP conformant

[Collagenase NB 1 GMP Grade \(cat. no. N0002937\)](#).

[Neutral Protease NB \(cat. no. S3030111\)](#) is a protease from *C. histolyticum*. It has a proteolytic activity of ≥ 0.50 DMC U/mg. It is also available as GMP conformant **[Neutral Protease NB GMP Grade \(cat. no. N0002936\)](#)**.

[Collagenase NB 4 Standard Grade \(cat. no. SD1745401\)](#) has a collagenase activity of ≥ 0.1 PZ U/mg and a balanced mix of proteolytic side activities.

Collagenase NB 6 GMP Grade (cat. no. N0002779) has a collagenase activity of ≥ 0.1 PZ U/mg and a balanced mix of proteolytic side activities. It is manufactured according to GMP guidelines and sterile according to European Pharmacopoeia.

Collagenase NB 8 Broad Range (cat. no. S1745601) is characterized by a high collagenase activity (≥ 0.9 PZ U/mg) and reduced levels of proteolytic side activities.

Isolation conditions

The suggested Collagenase NB concentrations and isolation conditions should be regarded as starting points. Collagenase NB dosage is recommended in PZ units to ensure consistent results.

For further information on optimization of tissue digestion please contact us at (631) 348-0333 or collagenase@creascentchemical.com or visit us at www.creascentchemical.com.

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