



## Introduction

It is highly recommended that you read this guide for specific column considerations before proceeding with the installation.

## Column storage conditions

Your ProDx™ Protease column has been delivered to you in a chilled container to maintain its activity. We recommend that when you receive the column, it should be transferred to a refrigerator or other suitable location and maintained between 2°C and 8°C.

## Operation

ProDx Protease columns have been developed to meet the needs of 0°C HDX experiments and fluidics systems.

ProDx Protease columns are robust enough to handle high concentrations of Guanidine Hydrochloride (6.4 M), Urea (8 M), TCEP (4 M) as well as many other favored quench solutions.

- It is recommended that care is taken to balance the concentration of quench solutions against the flow rate used to load and desalt the sample after digestion.
- If salt adducts are visible in subsequent chromatography, this is an indication that either a higher flow rate, or longer digestion/desalting time may be required.
- If sample carryover is observed it may be necessary to reverse the direction of the column to allow backflushing of the loading end frit.
- Do not use any organic solvents (even in low concentrations) to address carryover - doing so will reduce the activity of the column.
- Flow rates: ProDx Protease columns are designed to be used at flow rates from 100  $\mu\text{L}/\text{min}$  up to 400  $\mu\text{L}/\text{min}$  of 100% Acidified Aqueous solutions (1.5 to 4 pH).
- Pressure: ProDx Protease columns have been developed to operate at pressures of up to 1000 bar. To ensure that this maximum range is attainable in your system, please make sure you are using ProDx fittings or other hardware that is rated for the pressure ratings desired.
- Operating temperature: Column performance can be reduced if the column is maintained and operated above 15°C for extended periods of time, or if exposed to non-acidified aqueous reagents or organic reagents.

### After use

If you have used your ProDx Protease column and wish to return it to storage, we recommend first flushing the column with an acidified Aqueous solution (such as 0.1% Formic acid or 0.05% Trifluoroacetic acid, or any preferred buffer at or about 2.5 pH). Do not store the column in pure water or any buffer above 4 pH.

Once flushed clean of residual salt and sample, tightly cap the column and store it at between 2°C and 8°C until needed.

We advise against the use of a flushing solution that contains any organic solvents. Exposing the Protease material to even small amounts of Methanol or Acetonitrile can reduce its activity.

### Storage conditions

- 2°C to 8°C, Aqueous buffer at 2.5 pH.
- Do not freeze or allow to become frozen.

### Information and support

Visit [www.trajanscimed.com](http://www.trajanscimed.com) or contact [techsupport@trajanscimed.com](mailto:techsupport@trajanscimed.com)

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Date first used
Initial performance

Date	Sample	Instrument	Notes	Operator