

# Product Components List

## ProteoTuner™ Shield System N

Catalog No.	Amount
632172	each

### Description

Direct manipulation of the presence and absence of a specific protein of interest is a very powerful tool for analyzing protein function. The ProteoTuner Shield System N uses a unique method to regulate the amount of protein of interest present in a cell, quickly and directly. It utilizes a ligand-dependent destabilization domain (DD) and its membrane permeable stabilizing ligand, Shield1. The DD is based on a 12 kDa mutant of the FKBP protein, which is expressed as a tag onto the N-terminus of your protein of interest cloned into the pTuner Vector. In the presence of Shield1, the DD-tagged protein is stabilized and will accumulate inside the cell. This ligand dependent stabilization occurs very quickly, and has been observed as soon as 15–30 minutes after the addition of Shield1. However, in the absence of the protective ligand Shield1, the DD-tagged protein of interest is rapidly degraded. Removing the Shield1 (by splitting the cells into media without Shield1) allows for protein destabilization, causing a fast degradation of the protein of interest. The extent of stabilization via Shield1 directly correlates with the amount of the ligand in the medium, so it is possible to tune the amount of protein of interest present in the cell, by controlling the amount of the Shield1 ligand.

### Package Contents

- pTuner Vector (Cat. No. 632170) (Not sold separately) >> [View Components](#)
- Shield1 (500 µl) (Cat. No. 632189) >> [View Components](#)

For storage conditions, please see the Certificate of Analysis supplied with each component.

### Product Documents

Documents for our products are available for download at [www.clontech.com/manuals](http://www.clontech.com/manuals)

The following documents apply to this product:

- ProteoTuner Plasmid-Based Shield Systems User Manual

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This document has been reviewed and approved by the Quality Department.

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#### Takara Bio USA, Inc.

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