# **Product Components List**



## **NFkB DD Red Reporter System**

Catalog No. Amount 631081 Each

### **Description**

The NF $\kappa$ B DD Red Reporter System is designed to monitor NF $\kappa$ B activation in mammalian systems, with minimal background signal. It includes the pNF $\kappa$ B-DD-tdTomato Reporter vector and Shield1.

pNFκB-DD-tdTomato encodes a red fluorescent protein reporter tagged at its N-terminus with the ProteoTuner<sup>TM</sup> destabilization domain (DD), and under the control of the NFκB promoter. The DD causes the DD-tdTomato reporter to be rapidly targeted to and degraded by proteasomes. This minimizes background fluorescence from leaky promoters prior to promoter activation.

To monitor NF $\kappa$ B activity, a candidate inducer is added to the medium simultaneously with the DD's stabilizing ligand, Shield1. This allows DD-tdTomato to accumulate in response to NF $\kappa$ B activation. As a result, only the reporter molecules expressed during NF $\kappa$ B induction contribute to the fluorescence signal. This system provides a considerably higher signal-to-noise ratio than can be obtained with non-destabilized or constitutively destabilized reporter systems.

#### **Package Contents**

- pNFκB-DD-tdTomato Reporter (Cat. No. 631082; 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 <a href="www.clontech.com/manuals">www.clontech.com/manuals</a>
The following documents apply to this product:

- DD-Fluorescent Protein Reporter Systems Protocol-at-a-Glance (PT4088-2)
- pNFkB-DD-tdTomato Reporter Vector Information Packet (PT5117-5)
- 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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