Product Components List



CRE DD Red Reporter System

Catalog No. Amount 631087 Each

Description

The CRE DD Red Reporter System is designed to monitor cAMP response element binding protein (CREB) activity in mammalian cells, with minimal background signal. It includes the pCRE-DD-tdTomato Reporter vector and Shield1.

pCRE-DD-tdTomato encodes a red fluorescent protein reporter tagged at its N-terminus with the ProteoTuner™ destabilization domain (DD), and under the control of the CRE 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 CREB 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 CREB activation. As a result, *only* the reporter molecules expressed *during* CRE 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

- pCRE-DD-tdTomato Reporter (Cat. No. 631088) (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
The following documents apply to this product:

- DD-Fluorescent Protein Reporter Systems Protocol-At-A-Glance
- pCRE-DD-tdTomato Reporter Vector Information Packet
- 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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