



General Gene Knockdown Quantification Kit

Product Information

Cat.No.

Kit-0362

Product Overview

General Gene Knockdown Quantification Kit is used for measuring gene knockdown induced by siRNA or antisense oligonucleotide at the protein level.

Description

Targeted gene knockdown using small interfering RNA (siRNA) or antisense oligonucleotide has been valuable technology for studying gene function. Gene knockdown leads to reduction in mRNA and subsequently protein expression. It can often be verified at mRNA level by Northern blot or quantitative RT-PCR. However, decrease in the amount of a specific mRNA does not typically correlate well with protein levels present in the cell. Gene knockdown can also be measured at the protein level with Western blot. Western blot analysis is the most comprehensive way of showing that expression of the target gene has been down regulated. However, this method, while sensitive, often lacks the ability to discriminate between samples in which the differences in protein levels are minimal. It is also limited in its application to high-throughput analysis.

Applications

General Gene Knockdown Quantification Kit is suitable for quantifying gene knockdown caused by siRNA or antisense oligonucleotides using mammalian tissue and cell extracts.

Usage

For research use only (RUO)

Storage

Upon receipt: (1) Store the Detection Antibody at -20°C; (2) Store Q2, Q4, Q6, GAPDH Control Antibody, and 88-Well Assay Strips at 4°C away from light; (3) Store all other components at room temperature. The kit is stable for up to 6 months from the shipment date, when stored properly. Note: Check if wash buffer, Q2 contains salt precipitates before using. If so, warm (at room temperature or 37°C) and shake the buffer until the salts are re-dissolved.



General Gene Knockdown Quantification Kit

Kit Components

Q1 (Extraction Buffer) 6 ml Q2 (10X Wash Buffer) 14 ml Q3 (Protein Capture Buffer) 0.5 ml Q4 (Blocking Buffer) 10 ml Q5 (Antibody Buffer) 6 ml Q6 (Developing Solution) 5 ml Q7 (Stop Solution) 3 ml GAPDH Control Antibody* 10 µl Detection Antibody* 6 µl 8-Well Assay Strips (with Frame) 6 User Guide 1* For maximum recovery of the products, centrifuge the original vial prior to opening the cap.

Detection method Colorimetric

Compatible Sample Types

Cell, Tissue

Features & Benefits

Quick and efficient. Completion of entire assay needs only 4 hours. Innovative colorimetric assay without the need for radioactivity, electrophoresis, or chromatography. The convenient internal control is included for standardization and normalization of target gene knockdown effect. Strip microplate format makes the assay flexible: manual or high throughput. Simple, reliable, and consistent assay conditions.