CREATIVE BIOMART®
Assay Kit

Protein Disulfide Isomerase (PDI) Activity Assay (Fluorometric)

Product Information

Cat

Kit-2365

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Product Overview

Protein Disulfide Isomerases (PDI, EC: 5.3.4.1) are multifunctional proteins that constitute a thio-disulfide oxidoreductase family. PDI is abundant in the lumen of endoplasmic reticulum (ER). PDI plays an essential role in catalyzing the rearrangement of disulfide (S-S) bonds in proteins and functions as a chaperone by inhibiting protein aggregation. Recent studies show that PDI activity is essential for cancer cell survival and proliferation, and targeting PDI activity with specific inhibitors abrogates survival responses leading to ER stress in cancer cells. Therefore, the detection of PDI activity is critical for mechanistic study, diagnosis, prevention, and therapeutic purposes. PDI Activity Assay kit utilizes the reductase activity PDI for determining its activity in a variety of samples. The Kit employs a synthetic quenched fluorescent substrate which gets cleaved in the presence of PDI producing an enhanced fluorometric signal (Ex/Em = 490/580 nm). In the presence of PDI specific inhibitor, the quenched fluorescent substrate cannot be cleaved by PDI. PDI Activity Assay Kit is simple, sensitive, and high-throughput adaptable with the detection limit as low as 0.1 mU.

Applications

This assay has a detection sensitivity as low as 0.1 mU.

Storage

-20°C

Shipping

Gel Pack

Size

100 assays

Kit Components

Tel: 1-631-559-9269 1-516-512-3133
Email:info@creative-biomart.org
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA

CREATIVE BIOMART®
Assay Kit

Protein Disulfide Isomerase (PDI) Activity Assay (Fluorometric)

PDI Assay Buffer; PDI Substrate; PDI Activator (100 mM); PDI Inhibitor (50X); PDI Positive Control; Fluorescence Standard (25 μM)

Target Species

Mammalian

Detection method Fluorescence (Ex/Em= 490/480 nm)

Features & Benefits

Simple procedure; Fast and convenient

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