

Universal Kinase Activity Assay Kit

Product Information

Cat

Kit-2244

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Product Overview

Protein Kinases belong to a large family of phosphotransferases that mediate a wide spectrum of metabolic events via signal transduction pathways. Protein Kinases catalyze transfer of a phosphate group from a phosphate donor to a substrate protein. Kinases modulate the function of numerous proteins and are well-known therapeutic targets in many diseases like cancer, inflammation and diabetes etc. ADP Sensor Universal Kinase Assay Kit is based on the fluorescence detection of ADP generated by Kinase activity. In this assay, ADP formed during the kinase reaction is converted to an intermediate by the ADP Sensor Mix, which then reacts with a probe to generate a strong and stable fluorescence signal at Ex/Em = 535/587 nm. ATP in the kinase reactions doesn't interfere with the assay; therefore our kinase assay can be read kinetically (or at endpoint). The kit provides a universal tool to measure kinase activity in presence of substrates of your interest, or to screen/characterize kinase inhibitors. The assay is simple, non-radioactive, highly sensitive ($<0.05 \mu\text{M}$ ADP) with broad ATP tolerance (up to 1 mM). The kit can detect as low as 1 ng of active Kinase.

Applications

Detection of Kinase activity, Characterization of Kinase substrates and inhibitors.

Storage

-20°C

Shipping

Gel Pack

Size

100 assays

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Kit Components

Kinase Assay Buffer; ADP Sensor I; ADP Sensor II; Probe (in DMSO); Ultra-pure ATP (ADP depleted); DTT (1M); ADP Standard

Target Species

Universal

Detection method Fluorometric (Ex/Em = 535/587 nm)

Features & Benefits

Ultrasensitive, Simple, HTP adaptable fluorometric assay kit for Kinase activity measurement.
Can detect as low as 1 ng of active Kinase.
Free of ATP interference (up to 1 mM)
