

GTPase Activity Assay Kit

Product Information

Common Name

GTPase

Cat.No. Kit-2528

Product Overview

The GTPase Assay kit is a homogeneous, bioluminescent assay that is used to measure the activities of GTPases and their associated proteins (GEFs and GAPs) in vitro. The assay quantitates the amount of GTP remaining after a GTPase reaction.

With the GTPase Assay kit, you can measure intrinsic GTPase activity, GAP-stimulated GTPase activity, GAP activity and GEF activity. The kit contains optimized reaction buffers, GTPase/GAP Buffer and GEF buffer, for performing GTPase and GAP reactions, and GEF reactions, respectively.

Storage

Store at -30°C to -10°C.

Size

1,000 assays

Kit Components

rGTP, 10mM 50µl
DTT, 100mM 100µl
GTPase/GAP Buffer 5ml
GEF Buffer 5ml
GTPase Buffer 5ml
GTPase Reagent, 500X 15µl
Detection Reagent 10ml
ADP, 10mM 0.5ml

Features & Benefits

GTPase Activity Assay Kit

Simple add-and-read format

Suitable for 96-, 384- and 1536-well plates

Low background and large dynamic range

Assay Protocol

The GTPase Assay kit measures GTPase activity by detecting the amount of GTP remaining after GTP hydrolysis in a GTPase reaction. After the GTPase reaction, addition of the GTPase Reagent converts any remaining GTP into ATP, which is converted to a luminescent signal upon addition of the Detection Reagent.

GTPase, GAP and GEF activity is inversely correlated to the amount of light produced. A highly active GTPase hydrolyzes more GTP, reducing the amount of ATP produced from GTP and reducing light output. A less active GTPase hydrolyzes less GTP, leaving a larger amount of GTP to be converted to ATP and producing more light.
