

PDE10A1 Assay Kit

Product Information

Cat.No.

Kit-1821

Product Overview

Phosphodiesterases (PDEs) play an important role in dynamic regulation of cAMP and cGMP signaling. PDE10A is a dual substrate PDE highly expressed in striatal medium spiny neurons. PDE10A inhibitors can improve the cognitive symptoms of schizophrenia, and exhibit potential therapeutic value for Huntington's disease. PDE10A1 is located in the cytosol, whereas PDE10A2 is a membrane-associated protein.

Size

384 reactions

Description

The PDE10A1 Assay Kit is designed for identification of PDE10A1 inhibitors using fluorescence polarization. The assay is based on the binding of a fluorescent nucleotide monophosphate generated by PDE10A1 to the binding agent. The key to the PDE10A1 Assay Kit is the specific binding agent. Using this kit, only two simple steps on a microtiter plate are required for PDE10A1 reactions. First, the fluorescently labeled cAMP is incubated with a sample containing PDE10A1 for 1 hour. Second, a binding agent is added to the reaction mix to produce a change in fluorescent polarization that can then be measured using a fluorescence reader.

Applications

Great for studying enzyme kinetics and screening small molecular inhibitors for drug discovery and HTS applications.

Storage

At least 6 months from date of receipt, when stored as directed. Kit components require different storage conditions. Be sure to store each component at the proper temperature upon arrival.

Kit Components

PDE10A1 Assay Kit

PDE10A1 recombinant enzyme: 1 µg; -80°C FAM-Cyclic-3', 5'-AMP (20 µM): 50 µl; -80°C PDE assay buffer: 25 ml; -20°C Binding Agent: 250 µl; +4°C Binding Agent Diluent: 25 ml; +4°C Black, low binding, microtiter plate: 1; Room temp.
