

MBD2 Binding Activity/Inhibition Assay Kit

Product Information

Cat.No.

Kit-0541

Product Overview

MBD2 Binding Activity/Inhibition Assay Kit is use for measuring the binding activity of MBD2 to methylated DNA.

Description

MBD2 (methyl-CpG-binding domain protein 2) is a member of the MBD protein family. MBD2 selectively binds to methylated DNA and suppresses transcription from a methylated target gene through recruiting transcriptional repressor complexes, which contain Mi-2/NuRD or HDACs. MBD2 has also been shown to catalyze demethylation by directly removing methyl groups from 5-methylcytosine residues in DNA. MBD2 is demonstrated to be associated with tumorigenesis. For example, deficiency of MBD2 suppresses intestinal tumor formation, indicating that MBD2 is necessary not only for tumor development but also for tumor growth. The binding activity of MBD2 to methylated DNA may be affected by MBD2 mutation and by biochemical or pharmacological intervention. So far few assays are available for measuring MBD2 binding activity in vitro. The MBD2 Binding Activity Assay Kit provides a unique procedure to measure binding activity of MBD2 to methylated DNA.

Applications

For measuring MBD2 binding activity in human cells/tissues.

Usage

For research use only (RUO)

Storage

Store MB3, MB4, MB5, MB6, and 8 well assay strips at 4°C away from light. Store other components at room temperature. All components are stable for 6 months from date of shipment in proper storage.

Kit Components

MBD2 Binding Activity/Inhibition Assay Kit

MB1 (10X wash buffer) 25 ml MB2 (assay buffer) 3 ml MB3 (methylated DNA 25 µg/ml)* 100 µl MB4 (affinity antibody 100 µg/ml)* 50 µl MB5 (detection antibody 200 µg/ml)* 20 µl MB6 (developing solution) 12 ml MB7 (stop solution) 6 ml 8 well sample strips (with frame) 12* For maximum recovery of the products, centrifuge the original vial after thawing prior to opening the cap.

Features & Benefits

The fastest procedure, which can be finished within 3 hours. Innovative colorimetric assay to quantitatively measure MBD2 binding activity. Strip microplate format makes the assay flexible: manual or high throughput analysis. Simple, reliable, and consistent assay conditions.
