



Mammalian Chromatin Extraction Kit

Product Information

Cat.No.

Kit-0214

Product Overview

Mammalian Chromatin Extraction Kit is used for isolating chromatin or DNA-protein complex from mammalian cells or tissues.

Description

Chromatin immunoprecipitation (ChIP) offers an advantageous tool for studying protein-DNA interaction. With ChIP, the experimenter can determine if a specific protein binds to the specific sequences of a gene in living cells by combining with PCR (ChIP-PCR), microarray (ChIP-chip), or sequencing (ChIP-Seq) techniques. For example, the measurement of the amount of methylated histone H3 at lysine 9 (meH3-K9) associated with a specific gene promoter region under various conditions can be achieved through a ChIP-PCR assay, while recruitment of meH3-K9 to the promoters on a genome-wide scale can be detected by ChIP-chip. In particular, the ChIP method with specific antibodies directly against various transcriptional factors is widely demanded. For performing ChIP, chromatin or DNA-protein complex in cells or tissues should be first isolated.

Applications

The Mammalian Chromatin Extraction Kit is suitable for isolating chromatin or DNA-protein complex from mammalian cells or tissues in a simple and rapid format. Chromatin prepared by this kit can be used in a variety of chromatin immunoprecipitation methods. The isolated chromatin can also be used in other chromatin-related applications such as in vitro protein-DNA binding assays and nuclear enzyme assays.

Target Species

Mammals

Usage

For research use only (RUO)



Mammalian Chromatin Extraction Kit

Storage

Upon receipt: (1) Protease Inhibitor cocktails at 4°C; (2) Store remaining components at room temperature. All components of the kit are stable for 6 months from the date of shipment, when stored properly. Note: Check if any buffers contain salt precipitates before use. If so, shake the buffer until the salts are re-dissolve.

Kit Components

10X Lysis Buffer 11 ml Extraction Buffer 11 ml Chromatin Buffer 11 ml Protease Inhibitor Cocktails (1000X)* 110 µl* Spin the solution down to the bottom prior to use.

Compatible Sample Types

Cell, Tissue

Features & Benefits

Extremely fast procedure: the entire procedure from cell/tissue sample to ready-to-use chromatin is less than 60 minutes. Convenient and flexible: the kit is suitable for preparing both native chromatin and cross-linked chromatin from monolayer or suspension cells, or from tissues. Unsheared chromatin makes it customizable for various analysis workflows that require either intact or fragmented chromatin, including ChIP, in vitro protein-DNA interaction analysis, nuclear enzyme assay, etc.