

## Product Data Sheet

# K2072 Apo-BrdU DNA Fragmentation Assay Kit

## Kit Contents

Components	K2072-50 50 assays	Part Number
Methyl Green	1 x 6 mL	K2072-C-1
200X Conjugate	1 x 35 µL	K2072-C-2
5X Reaction buffer	1 x 1.75 mL	K2072-C-3
Anti-BrdUBiotin Antibody	1 x 275 µL	K2072-C-4
Blocking buffer	1 x 22 mL	K2072-C-5
BrdUTP	1 x 0.44 mL	K2072-C-6
DAB Tablets	6 x 1 Vial	K2072-C-7
H <sub>2</sub> O <sub>2</sub> /Urea Tablets	6 x 1 Vial	K2072-C-8
Positive and Negative Control Slides	2 x 1 Unit	K2072-C-9
Proteinase K	1 x 0.11 mL	K2072-C-10
TdT Enzymes	1 x 41 µL	K2072-C-11

## Introduction

Internucleosomal DNA fragmentation is a sign of apoptosis in mammalian cells. The BrdU In Situ DNA Fragmentation Assay Kit provides a simple and convenient way for detection of DNA fragmentation in biological samples based on fluorescence microscopy or flow cytometry method. The kit provides complete components including positive and negative control cells.

The assay uses Br-dUTP (bromolated deoxyuridine triphosphate nucleotides) which is more easily incorporated into DNA strand breaks than other larger ligands such as digoxigenin, fluorescein and biotin. The greater incorporation generates brighter signal and the Br-dUTP sites can be identified by a fluorescein labeled anti-BrdU monoclonal antibody.

## Key facts

### Sample types

Cell culture extracts, Tissue sections

### Reactive species

Mammals

### Assay time

3h

## Storage

### Shipped at conditions

Blue Ice

### Appropriate short-term storage conditions

Multi

### Appropriate long-term storage conditions

Multi

### Storage information

Please refer to protocols

## Notes

Internucleosomal DNA fragmentation is a hallmark of apoptosis in mammalian cells. ApoBrdU-IHC DNA Fragmentation Assay Kit is a two-color TUNEL (Terminal deoxynucleotidyl transferase dUTP Nick End Labeling) assay for labeling DNA breaks to detect apoptotic cells by immunohistochemistry. The kit contains positive/negative control slides for assessing reagent performance; reaction and blocking buffers for processing individual steps in the assay; proteinase K; terminal deoxynucleotidyl transferase enzyme (TdT), bromodeoxyuridine triphosphate (Br-dUTP), biotin labeled antiBrdU antibody for labeling DNA breaks, horseradish peroxidase streptavidin conjugate, DAB, H<sub>2</sub>O<sub>2</sub>/Urea tablets for color generation and methyl green solution for counter staining the cells.

## Caution

### FOR RESEARCH PURPOSES ONLY.

### NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

**APExBIO Technology**

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