

# Anti-IdU (MOUSE) Monoclonal Antibody

**IdU Antibody** Catalog # ASR4253

#### **Specification**

## Anti-IdU (MOUSE) Monoclonal Antibody - Product Information

Host Mouse

Conjugate **Unconjugated** Clonality Monoclonal **Application** WB, IHC, E, I, LCI

**Application Note** Anti-IdU Antibody has been tested as

suitable for western blot, ELISA, and immunofluorescence microscopy. This antibody may be suitable for additional immunoassays including flow cytometry and immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Expect to

detect incorporated IdU thymidine analog

from replicated cells. **Physical State Liquid (sterile filtered)** 

Buffer 0.02 M Potassium Phosphate, 0.15 M

Sodium Chloride, pH 7.2

**Immunogen** Anti-IdU monoclonal antibody was

produced in mice by repeated

immunizations prepared via immunizations with BromodeoxyUridine-KLH followed by

hybridoma development.

Preservative 0.01% (w/v) Sodium Azide

## Anti-IdU (MOUSE) Monoclonal Antibody - Additional Information

#### **Purity**

Anti-IdU Monoclonal Antibody was purified from ascites fluid by Protein A chromatography. This antibody is specific for IdU. Cross-reactivity is not observed with BrdU, CldU or FdU.

# **Storage Condition**

Store IdU Antibody at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

## **Precautions Note**

This product is for research use only and is not intended for therapeutic or diagnostic applications.

#### Anti-IdU (MOUSE) Monoclonal Antibody - Protein Information

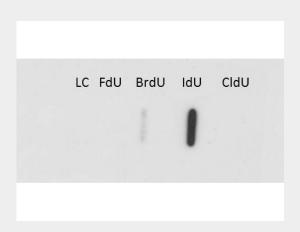


## Anti-IdU (MOUSE) Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## Anti-IdU (MOUSE) Monoclonal Antibody - Images



Western Blot of Anti-IdU Antibody. Lane 1: loading control. Lane 2: FdU. Lane 3: BrdU. Lane 4: IdU. Lane 5: CldU. Load: 20  $\mu$ g per lane. Primary antibody: Anti-IdU antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800 $^{\text{m}}$  mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed: IdU. Other band(s): no cross reactive bands were observed for other nucleoside analogs.

#### Anti-IdU (MOUSE) Monoclonal Antibody - Background

Iododeoxyuridine (5-Iodo-2'-deoxyuridine, IdU) is a synthetic thymidine nucleoside analog. IdU, like BrdU thymidine analog, is used to allow the detection of growing or proliferating cells in living tissues. During the S-phase of cell division, DNA replication occurs, and IdU can be incorporated into the newly synthesized DNA by substituting for naturally occurring thymidine. Antibodies specific for IdU are subsequently used to detect the incorporated IdU thymidine analog. This highlights cells that were actively replicating their DNA and is suggestive of actively growing cells. Antibody binding usually requires the DNA to be denatured, typically by exposing the cells to acid or heat.