

Anti-BrdU (MOUSE) Monoclonal Antibody

BrdU Antibody Catalog # ASR4252

Specification

Anti-BrdU (MOUSE) Monoclonal Antibody - Product Information

Host Mouse

Conjugate
Clonality
Application

Unconjugated
Monoclonal
WB, IHC, E, I, LCI

Application Note

Anti-BrdU Antibody has been tested as suitable for immunofluorescence and immunoblot assays. Antibody may be suitable for additional immunoassays

including flow cytometry and

immunohistochemistry. Specific conditions for reactivity should be optimized by the end user. Antibody will detect incorporated BrdU 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-BrdU 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-BrdU (MOUSE) Monoclonal Antibody - Additional Information

Purity

Anti-BrdU Monoclonal Antibody was purified from ascites fluid by Protein A chromatography. This antibody reacts strongly with BrdU. Cross-reactivity is observed with CldU and IdU.

Storage Condition

Store BrdU 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-BrdU (MOUSE) Monoclonal Antibody - Protein Information

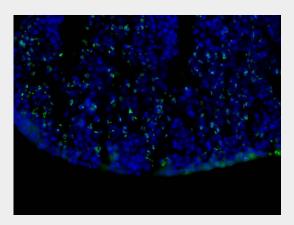


Anti-BrdU (MOUSE) Monoclonal Antibody - Protocols

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-BrdU (MOUSE) Monoclonal Antibody - Images



Immunofluorescence Microscopy of Mouse Anti-BrdU antibody. Tissue: OCT-embedded E10.5 mouse embryo. Localization: 40X, section through the developing limb bud. Fixation: 4% PFA. Antigen retrieval: not required. Primary antibody: BrdU antibody at 1:500 in 0.4% PBS+Triton with 1% normal sheep serum overnight at 4°C. Secondary antibody: Alexa Fluor 488 Anti-Mouse secondary antibody at 1:200 for 45 min at RT. Staining: Double labeled (green/blue) cells represent cells that were actively dividing.

Anti-BrdU (MOUSE) Monoclonal Antibody - Background

Bromodeoxyuridine (5-bromo-2'-deoxyuridine, BrdU) is a synthetic thymidine nucleoside analog. BrdU is commonly used to allow the detection of growing or proliferating cells in living tissues. During the S-phase of cell division, DNA replication occurs, and BrdU can be incorporated into the newly synthesized DNA by substituting for naturally occurring thymidine. Antibodies specific for BrdU are subsequently used to detect the incorporated BrdU 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.