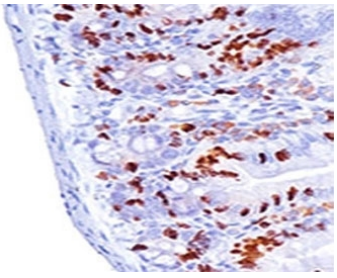
Bromodeoxyuridine Antibody [clone MoBu-1] (V3108)

Catalog No.	Formulation	Size
V3108-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3108-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3108SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3108IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

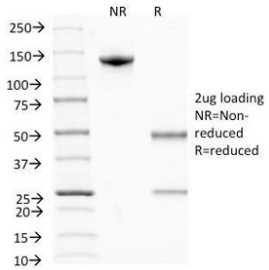
Citations (13)

Bulk quote request

Availability	1-3 business days
Species Reactivity	All species
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	MoBu-1
Purity	Protein G affinity chromatography
UniProt	Not Applicable
Localization	Nuclear
Applications	Flow Cytometry : 0.5-1ug/10^6 cells Immunofluorescence : 0.5-1ug/ml Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This Bromodeoxyuridine antibody is available for research use only.



IHC: Formalin-fixed, paraffin-embedded mouse small intestine stained with Bromodeoxyuridine antibody (MoBu-1).



SDS-PAGE Analysis of Purified, BSA-Free Bromodeoxyuridine Antibody (clone MoBu-1). Confirmation of Integrity and Purity of the Antibody.

Description

Bromodeoxyuridine antibody clone MoBu-1 is a monoclonal antibody that detects bromodeoxyuridine (BrdU), a thymidine analog incorporated into DNA during replication. BrdU labeling has been a cornerstone technique for monitoring cell proliferation and DNA synthesis. NSJ Bioreagents provides this antibody for cell biology, oncology, and developmental research.

The antibody produces strong nuclear staining in proliferating cells after BrdU incorporation. In cell biology, it enables precise quantification of DNA synthesis, allowing researchers to track cell cycle kinetics and measure growth rates. BrdU antibodies such as clone MoBu-1 are widely used in studies of cell cycle regulation, DNA replication, and checkpoint control.

In oncology, BrdU antibody clone MoBu-1 is applied to assess tumor proliferation rates. High levels of BrdU incorporation correspond to rapid cell division, a hallmark of malignancy. The antibody supports research into tumor aggressiveness, treatment response, and the development of anti-proliferative therapies.

In developmental biology, BrdU labeling allows mapping of proliferative zones in embryonic tissues. This antibody has been used to chart organogenesis and lineage determination, providing insights into how proliferation contributes to growth and differentiation.

In neuroscience, BrdU detection has been applied to studies of neurogenesis. The antibody enables visualization of newly generated neurons in adult brains, supporting research into regeneration and plasticity. This application has been critical in advancing understanding of stem cell biology in neural tissues.

Validated in tissue-based and cell-based systems, the antibody consistently provides specific nuclear staining with minimal background. Alternate names include BrdU antibody, DNA synthesis marker antibody, and cell proliferation marker antibody.

Application Notes

Optimal dilution of the Bromodeoxyuridine antibody should be determined by the researcher.

1. For staining of formalin-fixed tissues, incubate sections in 4N HCl for 30 min at RT followed by digestion with Trypsin at 1mg/ml PBS, 10 min at 37oC.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

BrdU conjugated to hemocyanine was used as the immunogen for the Bromodeoxyuridine antibody.

Storage

Store the Bromodeoxyuridine antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).