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Technical Data Sheet

# BrdU

Catalog Number :5911439

RUO: For Research Use Only. Not for use in diagnostic procedures.

## Product Information

**Synonyms:** Bromodeoxyuridine, Broxuridine, 5-Bromo-2'-deoxyuridine, 5-BrdU, 5-Bromouracil deoxyriboside,5-Bromo-2-deoxyuridine

**Chemical Name:** 5-bromo-1-[(2R,4S,5R)-4-hydroxy-5-(hydroxymethyl)oxolan-2-yl]pyrimidine-2,4-dione

**Molecular Formula:** $C_9H_{11}BrN_2O_5$

**Molecular Weight:** 307.1

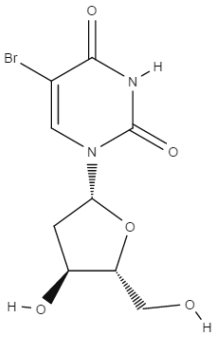
**CAS Number:** 59-14-3

**Purity:** ≥98%

**Applications:** FA

**Formulation:** Crystalline solid

**Storage:** Product should be kept at -20°C.




## Description

BrdU is a synthetic nucleoside that is an analog of thymidine and is commonly used in the detection of proliferating cells in living tissues. It is reported that BrdU can be used to promote chemical induction of mouse iPSCSs in conjunction with other chemical reagents including, CHIR 99021, ALK5 Inhibitor (RepSox), and Forskolin. BrdU is also reported to induce a sustained reduction in the proliferation rate of cancer cells.

## Preparation & Storage

Soluble in organic solvents such as ethanol or DMSO. DMSO up to 20mg/ml.

## References

1.Taupin, P. (2007). BrdU immunohistochemistry for studying adult neurogenesis: paradigms, pitfalls, limitations, and validation.;Brain research reviews,;53(1), 198-214.

2. Long, Y., Wang, M., Gu, H., Xie, X. (2015). Bromodeoxyuridine promotes full-chemical induction of mouse pluripotent stem cells.;Cell research.

3. Levkoff, L. H., Marshall, G. P., Ross, H. H., Caldeira, M., Reynolds, B. A., Cakiroglu, M., ... Laywell, E. D. (2008). Bromodeoxyuridine inhibits cancer cell proliferation in vitro and in vivo.;Neoplasia,;10(8), 804-IN13.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