

For Research Use Only. Not For Use In Diagnostic Procedures

Version 2.0

## 5-溴脱氧尿嘧啶核苷 (BrdU)

5-Bromo-2'-deoxyuridine; BrdU; &gt;99.5%

Do not eat

Store at -20° C



Cat.No. MG2223

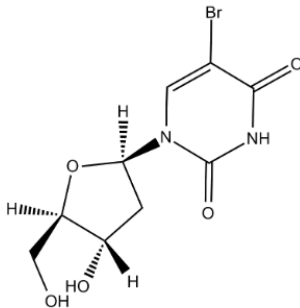
Size : 250mg □ 1g □

Molecular Weight : 307.1

Molecular Formula : C<sub>9</sub>H<sub>11</sub>BrN<sub>2</sub>O<sub>5</sub>

CAS : 59-14-3

Technical literature is available at: [www.mesgenbio.com](http://www.mesgenbio.com). E-mail MesGen Technical Services if you have questions on use of this system: [tech@mesgenbio.com](mailto:tech@mesgenbio.com)



### Application

- as a supplement to study the effect of electroconvulsive seizures on hippocampal neurogenesis.
- as a supplement to study the loss-of-gene function in adult zebrafish heart.
- in T lymphocyte proliferation assay.

### Description

5-Bromo-2'-deoxyuridine (BrdU) is used to analyze cell proliferation, because of its facile incorporation into DNA during the S phase of the cell cycle. BrdU stimulates cellular differentiation and maturation in leukemia cell lines, while it inhibits differentiation of friend erythroleukemia cells. Studies of BrdU incorporation often subsequently use BrdU-specific antibodies with fluorescent tags, for detection of the incorporated BrdU, via such methods as flow cytometry or fluorescence microscopy.

### Solubility

DMSO: 50 mg/mL, clear, colorless to very faintly yellow.

H<sub>2</sub>O : 20 mg/mL (Need ultrasonic)

### Storage condition

-20° C &amp; Protect from light

### 中文简介

BrdU是一种合成的胸苷溴化类似物，在S期可替代胸苷选择性插入细胞DNA。BrdU通常和广泛用于测定DNA合成和标记分裂细胞，最后用来研究诱导细胞增殖的信号通路和其他生理过程。BrdU通过体外细胞培养或体内注射的方式进行探针加载，然后用抗BrdU的抗体进行特异性检测。

BrdU标记后，对组织或细胞进行固定和透化后，需要额外的DNA水解步骤(有时也称DNA变性)，从而允许抗BrdU的抗体能够与插入DNA的BrdU结合。BrdU抗体能够与其他细胞标记物如Ki67，双皮质素(DCX)和NeuN联合使用来鉴定增殖细胞和新分化神经元。

### 溶解度

DMSO: 50 mg/mL, clear, colorless to very faintly yellow.

H<sub>2</sub>O : 20 mg/mL (Need ultrasonic)

备注：为了使其更好的溶解，请用37°C加热试管并在超声波水浴中震动片刻。不同厂家不同批次产品溶解度各有差异，仅作参考。若实验所需浓度过大至产品溶解极限，请添加助溶剂助溶或自行调整浓度。

### 保存条件

-20°C，避光干燥，保质期两年。

### 注意事项

1. BrdU 是一种诱变剂，操作过程一定要注意防护，不要与皮肤直接接触。另戴口罩避免粉尘吸入。
2. 为了您的安全和健康，请穿实验服并戴一次性手套操作。

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