

# Blebbistatin

## Product Manual

### I. Product Introduction

Shownin Blebbistatin (RP01008) is a widely used inhibitor of non-muscle myosin II ATPase. It acts on the ROCK-myosin II signaling pathway to prevent apoptosis caused by the isolation of pluripotent stem cells. Blebbistatin enhances the survival rate and cloning efficiency of isolated human pluripotent stem cells (hPSCs) while maintaining their self-renewal and pluripotency properties.

### II. Product Information

Table 1: Blebbistatin Product Description

Product Information	Cat.NO.	Amount	Concentration
Blebbistatin	RP01008	3 mg (1 mL)	10 mM (in DMSO)

### III. Storage Conditions

1. Store at -20°C, protected from light, and avoid repeated freezing and thawing. Stable for 6 months under these conditions.
2. Store at 4°C, protected from light, for up to 1 month.

### IV. Instructions for Use

1. For hPSC Passaging: On the day of passaging, add Blebbistatin to the hPSC complete medium at a final concentration of 2.5  $\mu$ M (e.g., 0.5  $\mu$ L for 2 mL of complete medium). This promotes the attachment of hPSCs to the growth surface (Figure 1-A). After 24 hours, replace the medium with Blebbistatin-free hPSC complete medium to continue the culture (Figure 1-B).

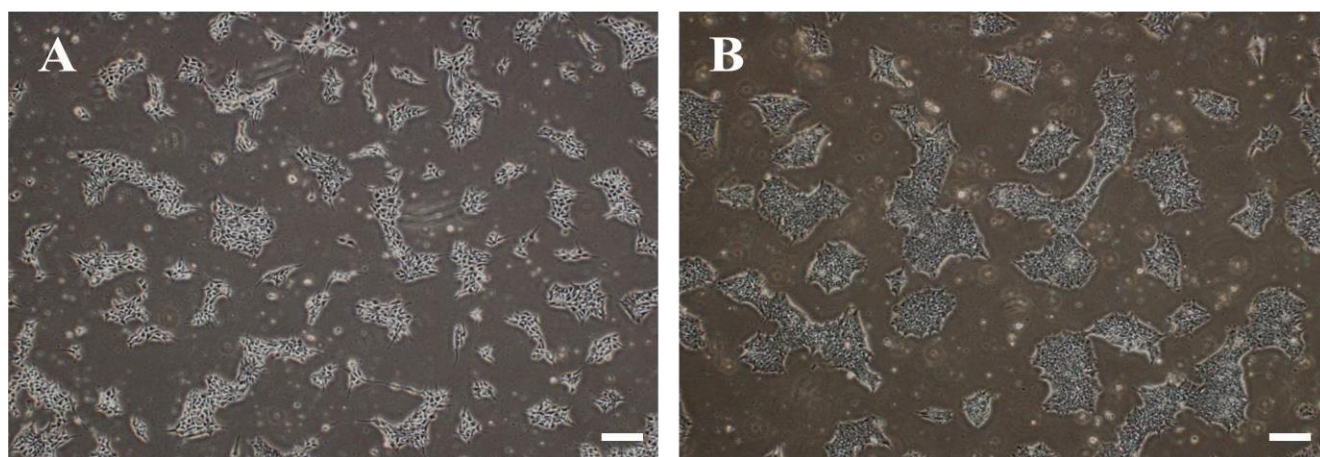


Figure 1. Morphology of hPSCs Passaged with Blebbistatin at a Final Concentration of 2.5  $\mu$ M

Panels A and B show hPSC morphology on Day 1 and Day 2 after passage, respectively.

Scale bar: 200  $\mu$ m.

2. In embryoid body formation experiments, a Blebbistatin concentration of 10  $\mu$ M is recommended.