

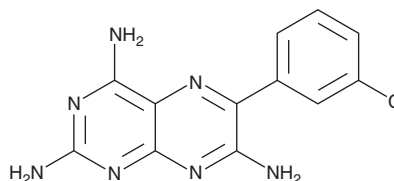
# PRODUCT INFORMATION



## Epiblastin A

Item No. 22758

**CAS Registry No.:** 16470-02-3  
**Formal Name:** 6-(3-chlorophenyl)-2,4,7-pteridinetriamine  
**MF:** C<sub>12</sub>H<sub>10</sub>ClN<sub>7</sub>  
**FW:** 287.7  
**Purity:** ≥98%  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Epiblastin A is supplied as a crystalline solid. A stock solution may be made by dissolving the epiblastin A in the solvent of choice, which should be purged with an inert gas. Epiblastin A is slightly soluble in DMSO and dimethyl formamide.

### Description

Epiblastin A is an ATP-competitive inhibitor of the casein kinase 1 (CK1) isoforms  $\alpha$ ,  $\delta$ , and  $\epsilon$  ( $IC_{50}$ s = 8.9, 0.5, and 4.7  $\mu$ M, respectively).<sup>1</sup> It is selective for CK1 $\alpha$ , CK1 $\delta$ , and CK1 $\epsilon$  at concentrations below 10  $\mu$ M, however, it also inhibits BRSK1, EEF2K, EGFR, MNK-2, and RIPK2 ( $IC_{50}$ s = 24-45  $\mu$ M). Epiblastin A reduces immunoprecipitation of CK1 $\alpha$ , CK1 $\delta$ , and CK1 $\epsilon$  from HCT116 cell lysates in a concentration-dependent manner. It induces reprogramming of mouse epiblast stem cells (mEpiSCs) into embryonic stem cells (ESCs) 8-fold more efficiently than triamterene (Item Nos. 21242 | 22486).

### Reference

1. Ursu, A., Illich, D.J., Takemoto, Y., *et al.* Epiblastin A induces reprogramming of epiblast stem cells into embryonic stem cells by inhibition of Casein Kinase 1. *Cell Chem. Biol.* **23**(4), 494-507 (2016).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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