## PRODUCT DATA SHEET



# Bioworld Technology CO., Ltd.

# **MLF1** Peptide

Cat No.: BS5797P

## **Background**

Myeloid leukemia factor 1 (MLF1) is a 268 amino acid protein expressed by a gene that is involved in translocations associated with acute myeloid leukemia. MLF1 is a widely expressed negative regulator of cell cycle progression functioning upstream of the tumor suppressor p53. MLF1 induces p53-dependent cell cycle arrest in murine embryonic fibroblasts. MLF1 expression also inversely affects the endogenous level of COP1, a ubiquitin ligase for p53, inhibits Epo-induced cell cycle exit, and inhibits a rise in the cell cycle inhibitor p27. Polo-like kinase 1 (Plk1) phosphorylates MLF1 at its Thr78 site, which induces ubiquitination and degradation of MLF1 before the transition from metaphase to anaphase. Mutations of these phosphorylation sites stabilize MLF1 and inhibit mitotic progression. MLF1 normally functions in multi-potent progenitor cells, and its dysregulation may be somewhat responsible for leukemogenesis.

#### **Swiss-Prot**

P58340

## **Applications**

**Blocking** 

#### **Specificity**

This peptide can be used with studies using BS5797 MLF1 pAb.

## **Purification & Purity**

Synthetic peptide MLF1. (Note: the amino acid sequence is proprietary). The purity is > 98%.

#### **Product**

1 mg/ml in DI water.

#### **Storage & Stability**

Store at  $4\,\mathrm{C}$  short term. Aliquot and store at -20  $\mathrm{C}$  long term. Avoid freeze-thaw cycles.

#### **Research Use**

For research use only, not for use in diagnostic procedure.