



**LD Biopharma, Inc.**  
9924 Mesa Rim Road Suite B  
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## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant Human MLF1 Protein  
**Catalog Number:** hRP-0890  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

Human myeloid leukemia factor 1 (MLF1) gene encodes an oncoprotein which is thought to play a role in the phenotypic determination of hematopoietic cells. Translocations between this gene and nucleophosmin have been associated with myelodysplastic syndrome and acute myeloid leukemia. Multiple transcript variants encoding different isoforms have been found for this gene.

Full-length human MLF1 (268 aa, isoforms-I) gene was constructed with 15 aa N-terminal T7 tag and expressed in E.coli as inclusion bodies. The final product was refolded using our unique “temperature shift inclusion body refolding” technology and chromatographically purified.

**Gene Symbol:** MLF1  
**Accession Number:** NP\_071888  
**Species:** Human  
**Size:** 50 µg / Vial  
**Composition:** 0.5 mg/ml, sterile-filtered, in 20 mM pH 8.0 Tris-HCl Buffer, with proprietary formulation of NaCl, KCl, EDTA, sucrose and DTT.  
**Storage:** In Liquid. Keep at -80°C for long term storage. Product is stable at 4 °C for at least 30 days.

### Key References

Molzan,M., et al., *Structural insights of the MLF1/14-3-3 interaction*. FEBS J. 279 (4), 563-571 (2012)

Lim,G., et al., *Detection of t(3;5) and NPM1/MLF1 rearrangement in an elderly patient*



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*with acute myeloid leukemia: clinical and laboratory study with review of the literature.* Cancer Genet. Cytogenet. 199 (2), 101-109 (2010)

## **Applications**

1. May be used for in vitro MLF1 mediated hematopoietic progenitor differentiation regulation study with “ProFectin” based intracellular delivery of this protein.
2. As soluble / native protein, may be used as enzymatic substrate protein for kinase and ubiquitin assay development.
3. May be used for mapping MLF1 protein-protein interaction.
4. May be used as antigen for specific antibody development.

## **Quality Control**

1. Purity: > 90% by SDS-PAGE.

## **Recombinant Protein Sequence**

MASMTGGQQMGRGEFMFRMLNSSFEDDPFFSE SILAHRENMRQMIRSFSEPFGRDLLSISDGRG  
RAHNRRGHNDGEDSLTHTDVSSFQTMDQMVSNMRYMQKLERNFGQLSVDPNGHSFCSSSVMTY  
SKIGDEPPKVFQASTQTRRAPGGIKETRKAMRDSDSGLEKMAIGHHIHDRAHVIKKSKNKKKTGD  
EEVNQEFINMNESDAHAFDEEWQSEVLKYKPGRHNLGNTRMRSVGHENPGSRELKRREKPPQQSP  
AIEHGRRSNVLGDKLHIKSSVKSNNK