



**LD Biopharma, Inc.**  
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## - PRODUCT DATA SHEET -

**Name of Product:** Recombinant Human MAFB Protein  
**Catalog Number:** hTF-1737  
**Manufacturer:** LD Biopharma, Inc.

### Introduction

The protein encoded by human MAFB gene is a basic leucine zipper (bZIP) transcription factor that plays an important role in the regulation of lineage-specific hematopoiesis. The encoded nuclear protein represses ETS1-mediated transcription of erythroid-specific genes in myeloid cells. Recent data from zebrafish testing indicated that MAFB map also plays a important role in controlling fetal lymphangiogenesis development.

Full-length human MAFB (322aa) gene was constructed with codon optimized gene synthesis technology, and fusion with 29 aa N-terminal T7 / His / TEV cleavage site Tag.. It was 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:** MAFB (KRML; MCTO)  
**Accession Number:** NP\_005452  
**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 7 days.

### Key References

Katarzyna Koltowska et al. *MafBa is a downstream transcriptional effector of Vegfc signaling essential for embryonic lymphangiogenesis in zebrafish.* GENES & DEVELOPMENT 29:1618–1630 . (2015)



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Gemelli C, et al., *MafB is a downstream target of the IL-10/STAT3 signaling pathway, involved in the regulation of macrophage de-activation*. *Biochim. Biophys. Acta* 1843 (5), 955-964 (2014)

Guo, S., et al., *Inactivation of specific beta cell transcription factors in type 2 diabetes*. *J. Clin. Invest.* 123 (8), 3305-3316 (2013)

## Applications

1. May be used for in vitro MAFB mediated *gene transcription* regulation study for *lymphangiogenesis or pancreatic beta cell & red blood cell differentiation* with “ProFectin” reagent based intracellular delivery of this protein.
2. May be used as specific protein substrate for kinase and ubiquitin (Sumo pathway) related enzyme functional screening assays.
3. May be used for MAFB protein-protein interaction mapping.
4. As immunogen for specific antibody production.

## Quality Control

Purity: > 90% by SDS-PAGE.

## Recombinant Protein Sequence

MASMTGGQQMGRGHHHHHHENLYFQGGFAAELSMGPELPTSPLAMEYVNDFDLLKFDVKKEPLG  
RAERPGRPCTRLQPAGSVSSTPLSTPCSSVPSSPSFSPTTEQKTHLEDLYWMASNYQQMNPEALN  
LTPEDAVALIGSHVPVQPLQSFDSFRGAHHHHHHHHPHPHHAYPGAGVAHDELGPHAHPHHHH  
HHQASPPSSAASPAQQLPTSHPGPGPHATASATAAGNGSVEDRFSDQLVSMVRELNRLR  
GFTKDEVIRLKQKRRTLKNRGYAQSCRYKRVQQKHHLENEKTQLIQQVEQLKQEVSRRLARERDA  
YKVKCEKLANSGFREAGSTSDSPSSPEFFL