

PrimeGene™ Recombinant Murine Fatty-acid-binding Protein 1
a biotechne brand (rMuFABP1)

PrimeGene Technical Data Sheet

Catalog Number:	622-01
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 14.2 kDa, a single non-glycosylated polypeptide chain containing 127 amino acids.
Quantity:	5µg/25µg/1000µg
AA Sequence:	MNFSGKYQLQ SQENFEPFMK AIGLPEDLIQ KGKDIKGVSE IVHEGKKIKL TITYGPKVVR NEFTLGEECE LETMTGEKVK AVVKLEGDNK MVTTFKGIKS VTELNQDTIT NTMTLGDIVY KRVSKRI
Purity:	> 95 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The binding affinity of rMuFABP1 for the synthetic ligand cis-parinaric acid has been measured by fluorescence titration. Half maximal fluorescence of 2.5 µM rMuFABP1 is achieved with approximately 5 µM cis-parinaric acid.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 2 % trehalose.
Endotoxin:	Less than 1 EU/µg of rMuFABP1 as determined by LAL method.
Reconstitution:	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 3 months, -20 to -70 °C under sterile conditions after reconstitution.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Murine Fatty-acid-binding Protein 1

The fatty-acid-binding proteins (FABPs) are a family of carrier proteins for fatty acids and other lipophilic substances such as eicosanoids and retinoids. These proteins are thought to facilitate the transfer of fatty acids between extra- and intracellular membranes. Fatty acid-binding protein 1 (FABP1) encoded by the FABP1 gene, also known as liver-type fatty acid-binding protein (L-FABP), is a member of FABP family and it is a small, highly conserved, cytoplasmic proteins. In addition, FABP1 binds free fatty acids and their coenzyme A derivatives, bilirubin, and some other small molecules in the cytoplasm. Furthermore, it may be involved in intracellular lipid transport. Through amino acid sequence comparison, murine FABP1 shares 84 % and 94 % a.a. sequence identity with human and rat FABP1.