

PrimeGene™ Recombinant Human Fatty acid binding protein-3
a biotechne brand (rHuFABP3)

PrimeGene Technical Data Sheet

Catalog Number:	602-03
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 14.7 kDa, a single non-glycosylated polypeptide chain containing 132 amino acids
Quantity:	5µg/20µg/1000µg
AA Sequence:	VDAFLGTWKL VDSKNFDDYM KSLGVGFATR QVASMTKPTT IIEKNGDILT LKTHSTFKNT EISFKLGVFEF DETTADDRKV KSIVTLDDGGK LVHLQKWDGQ ETTLVRELID GKLILTLTHG TAVCTRITYEK EA
Purity:	> 95 % by SDS-PAGE.
Biological Activity:	Testing in progress.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 µm filtered concentrated solution in 10mM PB, 150 mM NaCl, 1 mM DTT, 0.1 % tween-20, 5 % trehalose, pH 7.4.
Endotoxin:	Less than 1.0 EU/µg of rHuFABP3 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.

Human Fatty acid binding protein-3

Fatty acid binding protein-3 is a member of a large superfamily of lipid binding proteins that are expressed in a tissue specific manner. FABP3 is one of ten cytoplasmic FABPs that are 14-15 kDa in size and range from 126-140 amino acids (aa) in length. Although all are highly conserved in their tertiary structure, there is only modest aa identity between any two members. The FABP family members are subdivided based on organ or tissue type it was originally expressed or identified; liver- (L-FABP), intestine- (I-FABP), heart- (H-FABP), adipocyte- (A-FABP), epidermal- (E-FABP), ileal- (IL-FABP), brain- (B-FABP), myelin- (M-FABP) and testis-FABP (T-FABP). Human H-FABP, the product of the FABP3 gene, is a 132 aa cytosolic protein that shows a flattened beta-barrel structure generated by a series of antiparallel beta-strands and two alpha-helices. One molecule of FABP3 is capable of binding one long-chain fatty acid. It is suggested that ligands first bind to the outside of the molecule, and this binding subsequently induces a conformational change in the binding protein, resulting in "internalization" of the ligand. Human FABP3 is 86%, 89% and 89% aa identical to mouse, rat and canine FABP3, respectively. It also shows 29% and 32% aa identity to human L-FABP and I-FABP, respectively.