

# ChemWhat Recombinant Murine Fatty-acid-binding Protein 1 (rMuFABP1)

A brand under Watson

## ChemWhat Technical Data Sheet (TDS)

<b>Catalog Number:</b>	622-01
<b>Source:</b>	<i>Escherichia coli</i> .
<b>Molecular Weight:</b>	Approximately 14.2 kDa, a single non-glycosylated polypeptide chain containing 127 amino acids.
<b>Quantity:</b>	5µg/25µg/1000µg
<b>AA Sequence:</b>	MNFSGKYQLQ SQENFEPFMK AIGLPEDLIQ KGKDIKGVSE IVHEGKKIKL TITYGPKVVVR NEFTLGEECE LETMTGEKVK AVVKLEGDNK MVTTFKGIKS VTELNQDTIT NTMTLGDIVY KRVSKRI
<b>Purity:</b>	> 95 % by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	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.
<b>Physical Appearance:</b>	Sterile Filtered White lyophilized (freeze-dried) powder.
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4, 2 % trehalose.
<b>Endotoxin:</b>	Less than 1 EU/µg of rMuFABP1 as determined by LAL method.
<b>Reconstitution:</b>	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.
<b>Shipping:</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage:</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"><li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li><li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li><li>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li></ul>
<b>Usage:</b>	ChemWhat Limited in UK offers this branded product for research, development or further evaluation purposes. <b>NOT FOR HUMAN USE.</b>

### *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.