

# Recombinant Escherichia coli Long-chain-fatty-acid--CoA ligase(fadD)

Catalog No: #AP70943

Package Size: #AP70943-1 20ug #AP70943-2 100ug #AP70943-3 1mg

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## Description

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| Product Name          | Recombinant Escherichia coli Long-chain-fatty-acid--CoA ligase(fadD)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Host Species          | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Purification          | Greater than 90% as determined by SDS-PAGE.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Immunogen Description | Expression Region:1-561aaSequence Info:Full Length                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Other Names           | Long-chain acyl-CoA synthetase<br>Short name:Acyl-CoA synthetase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Accession No.         | P69451                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Calculated MW         | 66.3 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Tag Info              | N-terminal 6xHis-tagged                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Target Sequence       | MKKVWLNRYPADVPTEINPDYQSLVDMFEQSVARYADQPAFVNMGEVMTFRKLEERSRAFAAYLQQGLGL<br>KKGDRVALMMPNLLQYPVALFGILRAGMIVNVNPLYTPRELEHQLNDSGASAIVIVSNFAHTLEKVVDKTAVQ<br>HVILTRMGDQLSTAKGTVVNFVVKYIKRLVPKYHLPDAISFRSALHNGYRMQYVKPELVPEDLAFLQYTGTTG<br>VAKGAMLTHRNLNLANLEQVNATYGPLLHPGKELVVTALPLYHIFALTINCLLFIELGGQNLLITNPRDIPGLVKEL<br>AKYPFTAITGVNTLNFNALLNNKEFQQLDFFSLHLSAGGGMPVQQVVAERWVKLTGQYLLEGYGLTECAPLVSV<br>NPYDIDYHSGSIGLPVPSTEAKLVDDDDNEVPPGQPGELCVKGPQVMLGYWQRPDATDEIKNLWLTGDIIV<br>MDEEGFLRIVDRKKDMILVSGFNVYPNEIEDVVMQHPGVQEVAAGVPSGSSGEAVKIFVVKDPSLTEESLV<br>TFCRRQLTGKVPKLVFEFRDELPSNVGKILRRELRLDEARGKVDNKA |
| Formulation           | Tris-based buffer50% glycerol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Storage               | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br><br>Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                                                                                                                                                                                                          |

## Background

Catalyzes the esterification, concomitant with transport, of exogenous long-chain fatty acids into metabolically active CoA thioesters for subsequent degradation or incorporation into phospholipids. Activity is the highest with fatty acid substrates of > 10 carbon atoms

## References

"The Escherichia coli fadK (ydiD) gene encodes an anerobically regulated short chain acyl-CoA synthetase."

Morgan-Kiss R.M., Cronan J.E.

J. Biol. Chem. 279:37324-37333(2004)Research Topic:Others

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Note: This product is for in vitro research use only and is not intended for use in humans or animals.