

## Acyl-CoA synthetase from Microorganism

### Product Information

<b>Cat#</b>	NATE-1712
<b>Abbr</b>	ACS (Microorganism)
<b>Similar</b>	ACS3
<b>Source</b>	Microorganism
<b>Description</b>	Acetylcoenzyme A synthetase (ACS, EC 6.2.1.3)catalyzes the formation of acetyl coenzyme A with free fatty acids and coenzyme A. The ACS provided by our company is gene recombinant protein. It is of high purity and good activity.
<b>Form</b>	White powder, lyophilized
<b>Enzyme Commission Number</b>	EC 6.2.1.3
<b>Activity</b>	>20U/mg protein
<b>CAS No.</b>	9013-18-7
<b>Molecular Weight</b>	63 kDa (SDS-PAGE)
<b>Isoelectric point</b>	7.5
<b>pH Stability</b>	6.5~7.5 (25°C, 18hr)
<b>Michaelis Constant</b>	1.4×10 <sup>-5</sup> M(oleic acid) 1.9×10 <sup>-4</sup> M(CoA) 1.9×10 <sup>-5</sup> M(ATP)
<b>Unit Definition</b>	One unit will convert one micromole of fatty acid to acyl-CoAper min at pH 7.5 at 37°C.
<b>Optimum pH</b>	7.5
<b>Optimum temperature</b>	37°C

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<b>Thermal stability</b>	< 45°C (pH 7.5, 10min)
<b>Storage</b>	Store at -20°C.
<b>Inhibitors</b>	Ag <sup>+</sup> , Hg <sup>2+</sup> , Zn <sup>2+</sup> , Cu <sup>2+</sup> , Fe <sup>3+</sup>
<b>Synonyms</b>	EC 6.2.1.3; ACS; acyl-CoA synthetase; fatty acid thiokinase (long chain); acyl-activating enzyme; palmitoyl-CoA synthase; lignoceroyl-CoA synthase; arachidonyl-CoA synthetase; acyl coenzyme A synthetase; acyl-CoA ligase; palmitoyl coenzyme A synthetase; thiokinase; palmitoyl-CoA ligase; acyl-coenzyme A ligase; fatty acid CoA ligase; long-chain fatty acyl coenzyme A synthetase; oleoyl-CoA synthetase; stearoyl-CoA synthetase; long chain fatty acyl-CoA synthetase; long-chain acyl CoA synthetase; fatty acid elongase; LCFA synthetase; pristanoyl-CoA synthetase; ACS3; long-chain acyl-CoA synthetase I; long-chain acyl-CoA synthetase II; fatty acyl-coenzyme A synthetase; long-chain acyl-coenzyme A synthetase; FAA1