SUCCINYL-CoA SYNTHETASE from a prokaryote (Lot 140901d)

Recombinant

E-SCOAS **11/18**

(EC 6.2.1.5) Succinate:CoA ligase (ADP-forming)
CAZy Family: GH43
CAS: 9067-74-7

PROPERTIES

1. ELECTROPHORETIC PURITY:
- Two bands (α and β subunits) on SDS-gel electrophoresis (MW ~ 30,843 and ~ 41,393)
- One major band on isoelectric focusing (pI ~ 5.9)

2. SPECIFIC ACTIVITY:
13 U/mg protein at pH 8.4 and 25°C
One Unit of Succinyl-CoA synthetase activity is defined as the amount of enzyme required to release one µmole of succinyl CoA from succinic acid (5.8 mM) per minute in the presence of NADH and Coenzyme A in glycylglycine buffer (34 mM), pH 8.4 at 25°C.

3. SPECIFICITY:
Catalyses the following reaction:

ATP + succinate + CoA = ADP + phosphate + succinyl-CoA

4. RELATIVE RATES OF HYDROLYSIS OF SUBSTRATES:

Substrate	%
Succinic acid	100
ATP	< 0.002
NADH	< 0.001

Action on above substrates was determined in glycylglycine buffer (34 mM), pH 8.4 at 25°C.

5. PHYSICOCHEMICAL PROPERTIES:
Recommended conditions of use are at pH 8.4 and up to 25°C.

6. STORAGE CONDITIONS:
The enzyme is supplied as an ammonium sulphate suspension and should be stored at 4°C. For assay, this enzyme should be diluted in 100 mM glycylglycine buffer, pH 8.4 containing 10 mM $MgCl_2$. **Swirl to mix the enzyme immediately prior to use.**