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Instruction manual

Recombinant Acyl Coenzyme A Synthetase Medium Chain Family, Member 1 (ACSM1)

Organism Species: Rattus norvegicus (Rat)

FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)



# [PROPERTIES]

Source: Prokaryotic expression

Host: E.coli

Residues: Gly270~Glu520

Tags: N-terminal His Tag

**Subcellular Location:** Mitochondrion

**Purity:** > 60%

Traits: Freeze-dried powder

**Buffer formulation:** PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.

Original Concentration: 100µg

Applications: Positive Control; Immunogen; SDS-PAGE; WB.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 4.9

Predicted Molecular Mass: 31.5kDa

**Accurate Molecular Mass:** 37kDa as determined by SDS-PAGE reducing conditions.

#### Phenomenon explanation:

The possible reasons that the actual band size differs from the predicted are as follows:

- 1. Splice variants: Alternative splicing may create different sized proteins from the same gene.
- 2. Relative charge: The composition of amino acids may affects the charge of the protein.
- 3. Post-translational modification: Phosphorylation, glycosylation, methylation etc.
- 4. Post-translation cleavage: Many proteins are synthesized as pro-proteins, and then cleaved to give the active form.
- 5. Polymerization of the target protein: Dimerization, multimerization etc.

#### [USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

### [STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.



Store at 2-8°C for one month.

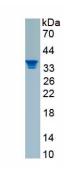
Aliquot and store at -80°C for 12 months.

**Stability Test:** The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

### [SEQUENCE]

G WILATVGCLL EPWTAGATVF VHNLPQFDPK VIVETLFKYP ITQCLAAPAV YRMVLQKNIS NLRFPTLEHC ATGGESLLPE EYEQWKQRTG LSIHEVYGQS ETGITCAIFR EMKVKRGSIG KAILPFDIQI IDEKGNILPP NTEGYIGIRI KPTRPLGLFV GYENSPEKTS EVECGDFYNS GDRATIDEDG YIWFLGRSDD VINASGYRIG PTEVENALVE HPAVSESAVV SSPDKDRGEV VKAFIVLNPE

### [ IDENTIFICATION ]



## [ IMPORTANT NOTE ]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.