

RPE217Hu01 10µg

Recombinant Serine Hydroxymethyltransferase 2, Mitochondrial (SHMT2)

Organism Species: Homo sapiens (Human)

Instruction manual

FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

12th Edition (Revised in Aug, 2016)



## [PROPERTIES]

Source: Prokaryotic expression

Host: E.coli

Residues: Asn30~His504

Tags: N-terminal His Tag

Subcellular Location: Secreted

**Purity:** > 97%

Traits: Freeze-dried powder

Buffer formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.01% skl, 5%Trehalose.

Original Concentration: 100µg/mL

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: 8.1

Predicted Molecular Mass: 56.3KDa

**Accurate Molecular Mass:** 60kDa 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.

#### [ <u>USAGE</u> ]

Reconstitute in ddH<sub>2</sub>O 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 ]

```
N AAQTQTGEAN RGWTGQESLS
DSDPEMWELL QREKDRQCRG LELIASENFC SRAALEALGS CLNNKYSEGY
PGKRYYGGAE VVDEIELLCQ RRALEAFDLD PAQWGVNVQP YSGSPANLAV
YTALLQPHDR IMGLDLPDGG HLTHGYMSDV KRISATSIFF ESMPYKLNPK
TGLIDYNQLA LTARLFRPRL IIAGTSAYAR LIDYARMREV CDEVKAHLLA
DMAHISGLVA AKVIPSPFKH ADIVTTTTHK TLRGARSGLI FYRKGVKAVD
PKTGREIPYT FEDRINFAVF PSLQGGPHNH AIAAVAVALK QACTPMFREY
SLQVLKNARA MADALLERGY SLVSGGTDNH LVLVDLRPKG LDGARAERVL
ELVSITANKN TCPGDRSAIT PGGLRLGAPA LTSRQFREDD FRRVVDFIDE
GVNIGLEVKS KTAKLQDFKS FLLKDSETSQ RLANLRQRVE QFARAFPMPG
FDEH
```

## [ IDENTIFICATION ]

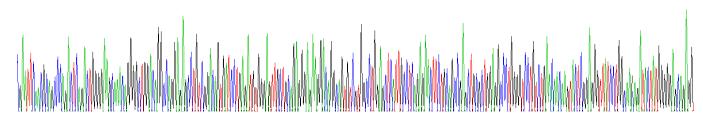
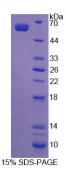


Figure . Gene Sequencing (extract)





# [ 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.