

SHMT2 Knockout HeLa Cell Lysate, Homozygous

Catalog No.: RM02289

Basic Information

Catalog No.

RM02289

Category

Cell Lysate

Parental Cell line

HeLa

Genotype

Knockout

Gene Information

Gene Symbol

SHMT2

Species

Human

Gene ID

6472

Swiss Prot

P34897

Synonyms

GLYA; HEL-S-51e; SHMT

Contact

☎ | 400-999-6126

✉ | cn.market@abclonal.com.cn

🌐 | www.abclonal.com.cn

Background

This gene encodes the mitochondrial form of a pyridoxal phosphate-dependent enzyme that catalyzes the reversible reaction of serine and tetrahydrofolate to glycine and 5,10-methylene tetrahydrofolate. The encoded product is primarily responsible for glycine synthesis. The activity of the encoded protein has been suggested to be the primary source of intracellular glycine. The gene which encodes the cytosolic form of this enzyme is located on chromosome 17. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009]

Product Information

Description

SHMT2 Knockout HeLa Cell Line is engineered from HeLa cell line with Gene-Editing technology.

Allele-1:58bp deletion in exon2

Allele-2:59bp deletion in exon2

Mammalian cells such as human, rat and mouse cells are normally diploid with two alleles. Homozygote: both alleles were knocked out, mRNA has no signal, no expression of proteins. Heterozygote: only one allele was knocked out, the mRNA transcript levels was decreased compared to wild type, and the protein expression levels was also lower than that of the wild type.

Packaging

1 vial parental cell Lysate and 1 vial knockout cell Lysate

Shipping Conditions

4°C

Amount

50μL, 2μg/μL.

Storage

Lysate is stable for 12 months when stored at -20°C. Minimizing freeze-thaw cycles.

Protocol

To be used as WB control. Lysate is supplied in 1× SDS sample buffer (2% SDS, 60 mM Tris-HCl pH 6.8, 10% Glycerol, 0.02% Bromophenol blue, 60 mM beta-mercaptoethanol). Lysate should be boiled for 3 - 5 minutes before loading onto gel.

Sequencing data

WT AGGAGAGCCTGTCG*****GCCTGGAGCTCATT
Mut AGGAGAGCCTGTCG***Deletion***GCCTGGAGCTCATT
Allele-1: 58bp deletion in exon2

WT AGGAGAGCCTGTCG*****CCTGGAGCTCATTG
Mut AGGAGAGCCTGTCG***Deletion***CCTGGAGCTCATTG
Allele-2: 59bp deletion in exon2

Genome sequence analysis of PCR products from parental (WT) and SHMT2 Knockout (KO) HeLa cells, using sanger sequencing.