e-mail:exp-pet@sceti.co.jp

KC595 For research use only

(kDa)

250-

150-

75-

37-

25-

15-

Sample: lysate from human cancer cell line

1, 2: normal hepatic tissue derived from patient with colon cancer

3, 4: non-tumor tissue drived from patient with hepaticellular cancer

5, 6: hepatic cells derived from patient without recurrent hepaticellular cancer

7, 8: hepatic cells derived from patient with recurrent hepaticellular cancer

Anti Human GRHPR Monoclonal Antibody

Clone No. 7G1

This product is generated from GANP® mice.

Western blotting
1 2 3 5 6 7 8



Code No. KC595
Terget GRHPR

SCETI

Category Cancer Gene ID 9380

Primary Source HGNC:4570

Synonyms PH2; GLXR; GLYD

Type Monoclonal Antibody

Immunogen Partial peptide of Human GRHPR

(C-terminal region)

Raised in GANP® mouse

MyelomaP3U1Clone number7G1PurificationProteinG

Source Serum-free medium

la a tama

Isotype IgG2b,κ

Cross Reactivity

Label Unlabeled

Concentration 0.25 mg/mL

Contents (Volume) 50 µg (200 µL/vial)

Buffer PBS [containing 2% Block Ace as a stabilizer, 0.1% Proclin

as a bacteriostat]

Storage Store at - 20 °C long term, store at 4 °C short term. Avoid

repeated freeze-thaw cycles.

Application ELISA,WB

ELISA	WB	IHC	ICC
1.0	10-20	Not tested	Not tested
IP	FCM	IF	Neutralization
Not tested	Not tested	Not tested	Not tested
			(ua/ml.)

(µg/mL)

Reference

- 1. "Identification and expression of a cDNA for human hydroxypyruvate/glyoxylate reductase." Rumsby G. et al. Biochim. Biophys. Acta 1446:383-388(1999) [PubMed: 10524214] [Abstract]. Cited for: NUCLEOTIDE SEQUENCE [MRNA], SUBUNIT. Tissue: Liver.
- 2. "The gene encoding hydroxypyruvate reductase (GRHPR) is mutated in patients with primary hyperoxaluria type II." Cramer S.D. et al. Hum. Mol. Genet. 8:2063-2069(1999) [PubMed: 10484776] [Abstract]. Cited for: NUCLEOTIDE SEQUENCE [GENOMIC DNA / MRNA], INVOLVEMENT IN HP2. Tissue: Liver.
- 3. Liu B. et al. Submitted (DEC-1998) to the EMBL/GenBank/DDBJ databases. Cited for: NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA]. Tissue: Aorta.

UniPlot Summary

//Function Enzyme with hydroxy-pyruvate reductase, glyoxylate reductase and D-glycerate dehydrogenase enzymatic activities. Reduces hydroxypyruvate to D-glycerate, glyoxylate to glycolate oxidizes D-glycerate to hydroxypyruvate.

//Catalytic activity Glycolate + NADP+ = glyoxylate + NADPH. D-glycerate + NAD(P)+ = hydroxypyruvate + NAD(P)H.

//Subunit structure Homodimer. Ref.1 Ref.7

//Tissue specificity Ubiquitous. Most abundantly expressed in the liver. Ref.5 $\,$

//Involvement in disease Defects in GRHPR are the cause of hyperoxaluria primary type 2 (HP2) [MIM:260000]; also known as primary hyperoxaluria type II (PH2). HP2 is a disorder where the main clinical manifestation is calcium oxalate nephrolithiasis though chronic as well as terminal renal insufficiency has been described. It is characterized by an elevated urinary excretion of oxalate and L-glycerate.

//Sequence similarities Belongs to the D-isomer specific 2-hydroxyacid dehydrogenase family.