

**KC595**

For research use only

# Anti Human GRHPR Monoclonal Antibody

Clone No. 7G1

This product is generated from GANP® mice.



**Code No.** KC595  
**Target** GRHPR  
**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  
**Myeloma** P3U1  
**Clone number** 7G1

**Purification** ProteinG  
**Source** Serum-free medium

**Isotype** IgG2b, $\kappa$

**Cross Reactivity**

**Label** Unlabeled

**Concentration** 0.25 mg/mL

**Contents (Volume)** 50  $\mu$ g (200  $\mu$ L/vial)

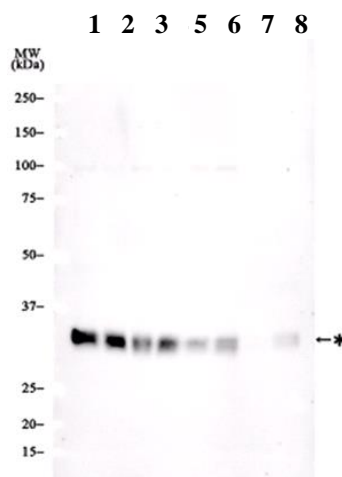
**Buffer** PBS [containing 2% Block Ace as a stabilizer, 0.1% Proclin as a bacteriostat]

**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

## Western blotting



Sample: lysate from human cancer cell line

- 1, 2: normal hepatic tissue derived from patient with colon cancer  
3, 4: non-tumor tissue derived from patient with hepatocellular cancer  
5, 6: hepatic cells derived from patient without recurrent hepatocellular cancer  
7, 8: hepatic cells derived from patient with recurrent hepatocellular cancer

( $\mu$ g/mL)

## Reference

- "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.
- "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.
- 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. Ref.2