

KHK Isoform C Antibody

Catalog No: #21709

Package Size: #21709-1 50ul #21709-2 100ul

Orders: order@signalwayantibody.comSupport: tech@signalwayantibody.com

Description

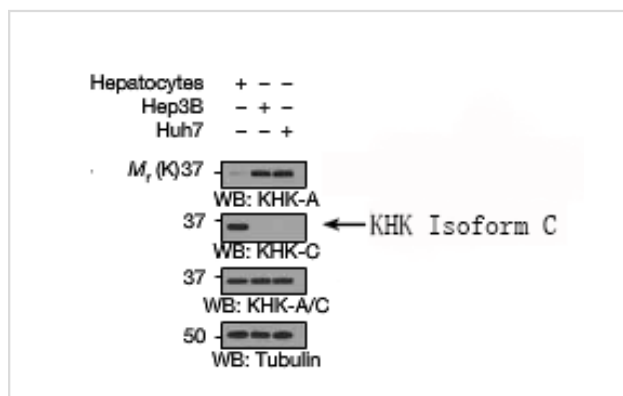
Product Name	KHK Isoform C Antibody
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC
Species Reactivity	Hu
Specificity	The antibody detects endogenous level of total KHK Isoform C protein.
Immunogen Description	Peptide sequence around aa.102~106 (N-N-S-N-G) derived from Human KHK Isoform C.
Conjugates	Unconjugated
Other Names	Ketohexokinase; Hepatic fructokinase; KHK
Accession No.	Swiss-Prot#: P50053-1NCBI Gene ID: 3795NCBI Protein#: NP_000212.1
Concentration	1.0mg/mL
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

Application Details

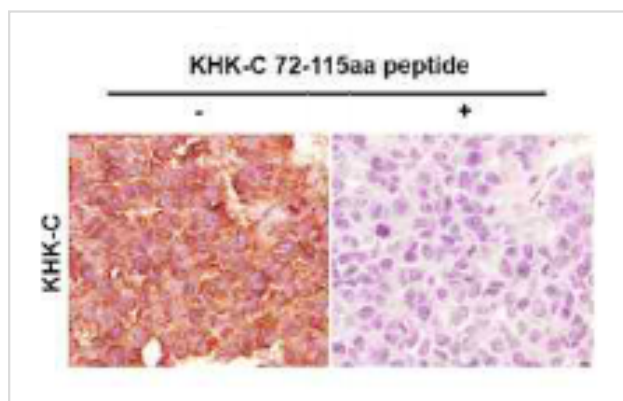
Western blotting: 1:500-1000

Immunohistochemistry: 1:50~1:100

Images



Western blot analysis of extracts from Hepatocytes, Hep3B and Huh7 cells using KHK Isoform C Antibody #21709. (Reference: Nat Cell Biol. 2016 May;18(5):561-71.)



Immunohistochemical analysis of tumors derived from Huh-7 cells using KHK Isoform C Antibody #21709 (left) or the same antibody preincubated with blocking peptide (right). (Reference: Nat Cell Biol. 2016 May;18(5):561-71.)

Background

Catalyzes the phosphorylation of the ketose sugar fructose to fructose-1-phosphate.

Bonthron D.T., Brady N., Donaldson I.A., Steinmann B. Hum. Mol. Genet. 3:1627-1631(1994)

Published Papers

Li X, Qian X, Peng LX et al., A splicing switch from ketohexokinase-C to ketohexokinase-A drives hepatocellular carcinoma formation, Nat Cell Biol., 18(5):561-71.(2016 May)

[PMID:27088854](#)

et al., A splicing switch from ketohexokinase-C to ketohexokinase-A drives hepatocellular carcinoma formation. In Nat Cell Biol on 2016 May by Xinjian Li, Xu Qian et al.. PMID:27088854, , (2016)

[PMID:27088854](#)

et al., The RNA-Binding Protein A1CF Regulates Hepatic Fructose and Glycerol Metabolism via Alternative RNA Splicing. In Cell Rep on 2019 Oct 8 by Kostas C Nikolaou, Hasan Vatandaslar, et al.. PMID: 31597092, , (2019)

[PMID:31597092](#)

et al., The small intestine shields the liver from fructose-induced steatosis. In Nat Metab on 2020 Jul by Cholsoon Jang, Shogo Wada, et al.. PMID: 32694791, , (2020)

[PMID:32694791](#)

et al., Ketohexokinase-A acts as a nuclear protein kinase that mediates fructose-induced metastasis in breast cancer. In Nat Commun on 2020 Oct 28 by Jiyoung Kim, Jengmin Kang, et al.. PMID:33116123, , (2020)

[PMID:33116123](#)

et al., Deletion of Fructokinase in the Liver or in the Intestine Reveals Differential Effects on Sugar-Induced Metabolic Dysfunction. In Cell Metab on 2020 Jul 7 by Ana Andres-Hernando, David J Orlicky, et al.. PMID:32502381, , (2020)

[PMID:32502381](#)

et al., Non-hematopoietic IL-4R α expression contributes to fructose-driven obesity and metabolic sequelae. In Int J Obes (Lond) on 2021 Nov by Michelle S M A Damen, Traci E Stankiewicz, et al.. PMID:34302121, , (2021)

[PMID:34302121](#)

et al., Ketohexokinase inhibition improves NASH by reducing fructose-induced steatosis and fibrogenesis. In JHEP Rep on 2020 Nov 20 by Emma L Shepherd, Raquel Saborano, et al.. PMID:33490936, , (2021)

[PMID:33490936](#)

Daqian Xu;Xinjian Li;Fei Shao;Guishuai Lv;Hongwei Lv;JongHo Lee;Xu Qian;Zheng Wang;Yan Xia;Linyong Du;Yanhua Zheng;Hongyang

Wang;Jianxin Lyu;Zhimin Lu et al., The protein kinase activity of fructokinase A specifies the antioxidant responses of tumor cells by phosphorylating p62, , (2019)

[PMID:31032410](#)

Kostas C. Nikolaou;Svenja Godbersen;Muthiah Manoharan;Stefan Wieland;Markus H. Heim;Markus Stoffel et al., Inflammation-induced TRIM21 represses hepatic steatosis by promoting the ubiquitination of lipogenic regulators, , (2023)

[PMID:37937648](#)

Samuel R. Taylor;Shakti Ramsamooj;Roger J. Liang;Alyna Katti;Rita Pozovskiy;Neil Vasan;SeoKyoung Hwang;Navid Nahiyaan;Nancy J. Francoeur;Emma M. Schatoff;Jared L. Johnson;Manish A. Shah;Andrew J. Dannenberg;Robert P. Sebra;Lukas E. Dow;Lewis C. Cantley;Kyu Y. Rhee;Marcus D. Goncalves et al., Dietary fructose improves intestinal cell survival and nutrient absorption, , (2021)

[PMID:34408323](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.