Datasheet for ABIN969196

anti-Hexokinase 2 antibody

3 Images | 3 Publications

Go to Product page

Overview

Quantity:	100 µL
Target:	Hexokinase 2 (HK2)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Application:	Western Blotting (WB), Immunohistochemistry (IHC), ELISA, Flow Cytometry (FACS)

Product Details

Immunogen:	Purified recombinant fragment of human HK2 expressed in E. coli.
Clone:	3D3
Isotype:	IgG1
Purification:	purified

Target Details

Target:	Hexokinase 2 (HK2)
Alternative Name:	HK2 (HK2 Products)
Background:	Description: The hexokinases utilize Mg-ATP as a phosphoryl donor to catalyze the first step of intracellular glucose metabolism, the conversion of glucose to glucose- 6-phosphate. Four hexokinase isoenzymes have been identified, including hexokinase I (HXK I), hexokinase II (HXK II), hexokinase III (HXK III) and hexokinase IV (HXK IV, also designated glucokinase or GCK). Hexokinases I-III each contain an N-terminal cluster of hydrophobic amino acids. Glucokinase

Target Details

	lacks the N-terminal hydrophobic cluster. The hydrophobic cluster is thought to be necessary for membrane binding. This is substantiated by the finding that glucokinase has lower affinity for glucose than do the other hexokinases .Hexokinase 2 is the predominant hexokinase isozyme expressed in insulin-responsive tissues such as skeletal muscle. Expression of this gene is insulin-responsive, and studies in rat suggest that it is involved in the increased rate of glycolysis seen in rapidly growing cancer cells. Aliases: HKII, HXK2, DKFZp686M1669, HK2
Molecular Weight:	102 kDa
Gene ID:	3099
HGNC:	3099
Pathways:	PI3K-Akt Signaling, Carbohydrate Homeostasis, Warburg Effect

Application Details

Application Notes:	ELISA: 1:10000, WB: 1:500 - 1:2000, IHC: 1:200 - 1:1000, FCM: 1:200 - 1:400
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	Ascitic fluid containing 0.03 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C/-20 °C
Storage Comment:	4°C, -20°C for long term storage

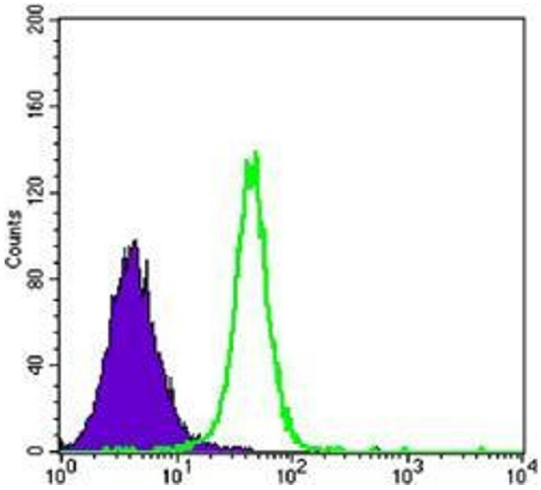
Publications

Product cited in:	Jan, Adolfsson, Allaman, Buccarello, Magistretti, Pfeifer, Muhs, Lashuel: "Abeta42 neurotoxicity is mediated by ongoing nucleated polymerization process rather than by discrete Abeta42 species." in: **The Journal of biological chemistry**, Vol. 286, Issue 10, pp. 8585-96, (2011) (PubMed).

Publications

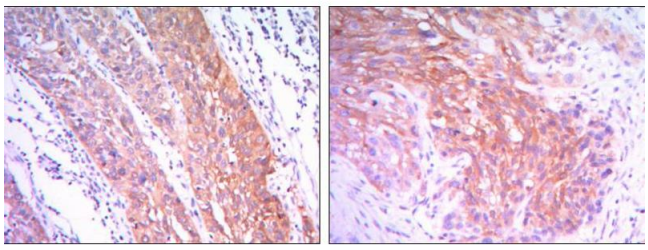
Deshmukh, Salehzadeh, Metayer-Coustard, Fahlman, Nair, Al-Khalili: "Post-transcriptional gene silencing of ribosomal protein S6 kinase 1 restores insulin action in leucine-treated skeletal muscle." in: **Cellular and molecular life sciences : CMLS**, Vol. 66, Issue 8, pp. 1457-66, (2009) (PubMed).

Images



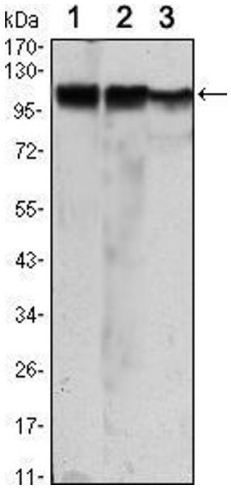
Flow Cytometry

Image 1. Flow cytometric analysis of K562 cells using HK2 mouse mAb (green) and negative control (purple).



Immunohistochemistry

Image 2. Immunohistochemical analysis of paraffin-embedded esophagus cancer tissues (left) and human lung cancer (right) using HK2 mouse mAb with DAB staining.



Western Blotting

Image 3. Western blot analysis using HK2 mouse mAb against Jurkat (1), Hela (2) and HEK293 (3) cell lysate.