Datasheet for ABIN1714840

anti-IGFBPL1 antibody (AA 201-278)

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Overview

Quantity:	100 µL
Target:	IGFBPL1
Binding Specificity:	AA 201-278
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This IGFBPL1 antibody is un-conjugated
Application:	ELISA, Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunofluorescence (Cultured Cells) (IF (cc)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human IGFBPL1
Isotype:	IgG
Predicted Reactivity:	Human,Mouse,Rat,Dog,Cow,Sheep,Pig,Horse
Purification:	Purified by Protein A.

Target Details

Target:	IGFBPL1
Alternative Name:	IGFBPL1 (IGFBPL1 Products)

Target Details

Background:	Synonyms: bA113O24.1, IGFBP-related protein 10, IGFBP-RP4, IGFBPRP4, insulin-like growth factor binding protein related protein 4, insulin-like growth factor-binding protein-like 1, IBPL1_HUMAN, insulin-like growth factor-binding-related protein 4. Background: IGFBPL1 is a secreted IGF (Insulin-like growth factor) binding protein that is known to contain an Ig-like C2-type (immunoglobulin-like) domain, an IGFBP N-terminal domain and a Kazal-like domain. IGF-binding proteins characteristically act to extend the half-life of IGFs and may influence the growth promoting effects of the IGFs. The interaction of IGFBPs with IGFs can affect cell surface receptors, specifically, IGFBPs may enhance or decrease a cells insulin sensitivity. IGFBPL1 has been found to be down-regulated in multiple tumors and thus may be a likely tumor suppressor candidate. Highly expressed in both brain and testis, IGFBPL1 is found at lower levels in the prostate, bladder and lung.

Application Details

Application Notes:	ELISA 1:500-1000
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200

Restrictions:	For Research Use only

Handling

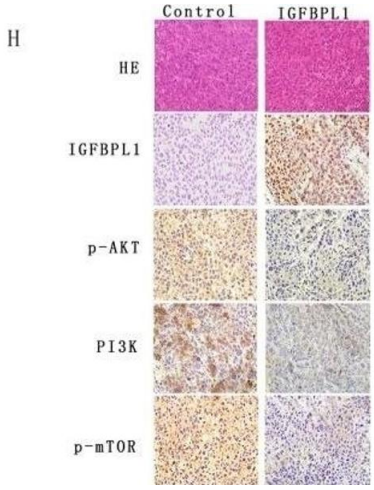
Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:

Liu, Zhang, He, Yang, Wang, Zhang, Guo: "Epigenetic silencing of IGFBPL1 promotes esophageal cancer growth by activating PI3K-AKT signaling." in: **Clinical epigenetics**, Vol. 12, Issue 1, pp. 22, (2021) (PubMed).

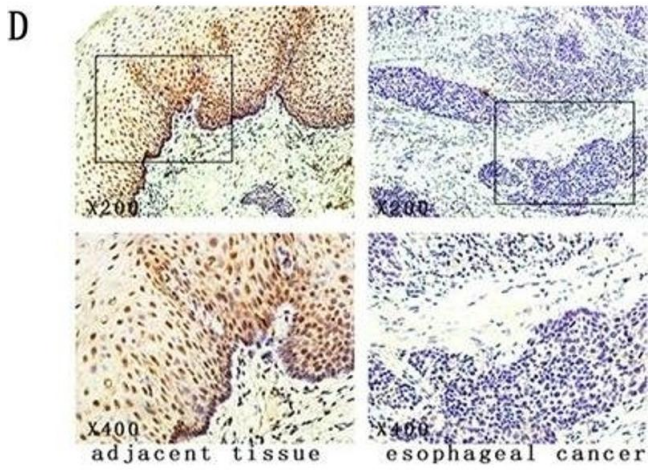
Images



Immunohistochemistry

Image 1. IGFBPL1 inhibits the PI3K-AKT signaling pathway and suppresses human ESCC cell xenograft growth in mice. a Western blots showed that IGFBPL1 has an effect on the expression levels of PI3K, AKT, p-AKT, mTOR, p-mTOR, and MYC in KYSE150, KYSE410, and KYSE510 cells. Control, control vector, IGFBPL1, IGFBPL1 expression vector, β-actin, internal control, NC, siRNA negative control, siRNA, siIGFBPL1. b Growth curves represent cell viability evaluated by MTT assay in the control group, control plus NVP-BEZ235(100nM) treatment group, siIGFBPL1 group, and siIGFBPL1 plus NVP-BEZ235 treatment group in KYSE510 cells. NC, control group, NC+, control plus NVP-BEZ235 treatment group, siRNA, siIGFBPL1, siRNA+, siIGFBPL1 plus NVP-BEZ235 treatment group. **p<0.0 1, ***p<0.001. c Western blots showed that IGFBPL1 has an effect on the expression levels of PI3K, AKT, p-AKT, mTOR, p-mTOR, and MYC in KYSE510 cells before and after NVP-BEZ235 treatment. NC, control group, NC+, control plus NVP-BEZ235 treatment group, siRNA, siIGFBPL1, siRNA+, siIGFBPL1 plus NVP-BEZ235 treatment group. d, e Represents tumors from KYSE150 cell xenografts in which IGFBPL1 is not expressed and IGFBPL1 is over-expressed. f Tumor growth curves of unexpressed IGFBPL1 and IGFBPL1 overexpressing KYSE150 cells. *p<0.05. g Tumor weight at 28th day after inoculation of unexpressed IGFBPL1 and IGFBPL1 overexpressing KYSE150 cells in nude mice. Bars indicate mean of five mice. ***p<0.001. h

Images of hematoxylin and eosin staining show tumors from IGFBPL1 unexpressed and IGFBPL1 re-expressed KYSE150 xenograft mice. IHC staining reveals the expression levels of IGFBPL1, p-AKT, PI3K, and p-mTOR in IGFBPL1 unexpressed and IGFBPL1 re-expressed KYSE150 cell xenografts. Magnification, x400 - figure provided by CiteAb. Source: PMID32041673



Immunohistochemistry

Image 2. The expression and methylation status of IGFBPL1 in human esophageal dysplasia and ESCC. a Pearson correlation coefficient between IGFBPL1 methylation and expression of each CpG site. b Scatter plots showing the methylation status of the 4th (cg16918846) CpG sites, which are correlated with loss or reduced IGFBPL1 expression in 186 cases of ESCC tissue samples. ***p<0.001. c Representative methylation results of IGFBPL1 in normal esophageal mucosa (NE), esophageal dysplasia (ED), and esophageal cancer (EC). The frequency of IGFBPL1 methylation was analyzed by chi-square test. d Representative IHC staining of IGFBPL1 in esophageal cancer (right panels) and adjacent tissue (left panels). Upper panels, x200, lower panels, x400. e The IGFBPL expression score is shown as a block diagram, the horizontal line represents the median score, the bottom and top of the box represent the 25th and 75th percentile, respectively, and the vertical bar chart indicates the scope of the data. There were significant differences in the expression of IGFBPL1 in adjacent tissues and cancer tissues in 70 cases of esophageal cancer. ***p<0.001. f The expression of IGFBPL1 and DNA methylation status is shown as a bar diagram. Reduced or lost expression of IGFBPL1 was significantly associated with promoter region hypermethylation. ***p<0.001 - figure provided by CiteAb. Source: PMID32041673