

SIMPLE WESTERN CERTIFIED ANTIBODY DATASHEET

[View Antibody Link](#)

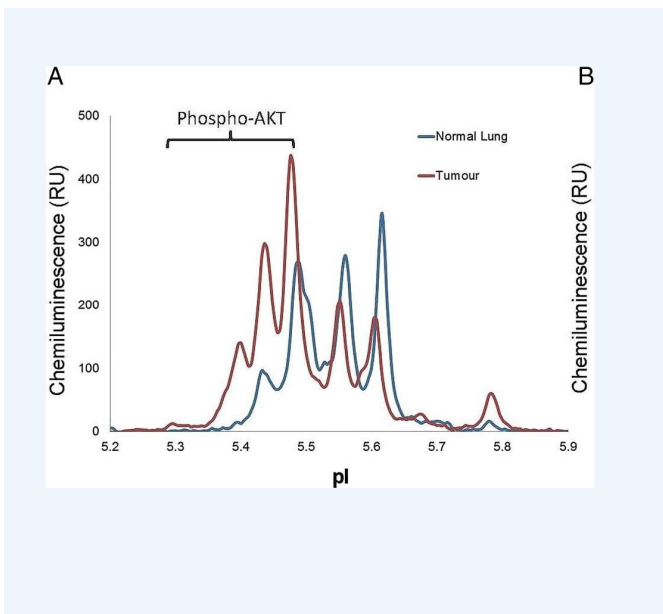


Figure 1: (A and B) Representative peaks using AKT primary antibody in normal lung and emphysema and tumour and matched normal lung, respectively. (C) Bar chart showing geometric mean total AKT and total phosphorylated AKT in benign lung and tumour tissue. (D) Correlation of total AKT signal with FDG PET/CT SUV. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. FDG, fluorodeoxyglucose PET, positron emission tomography RU, relative unit SUV, standardised uptake volume.

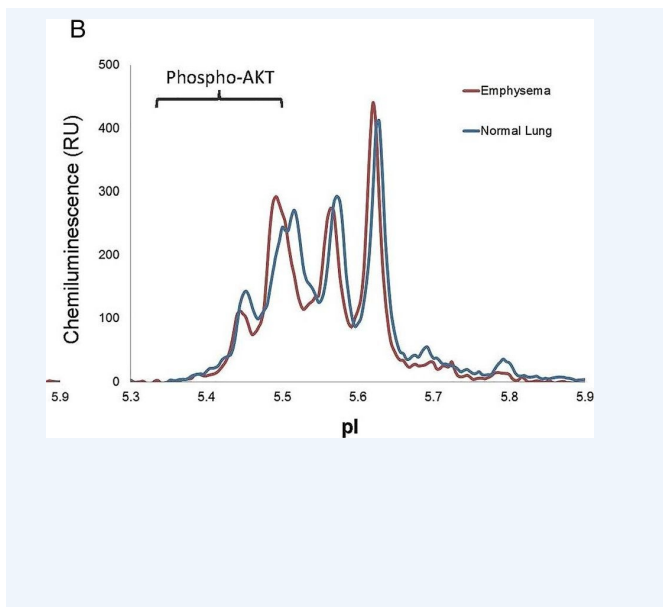


Figure 2: (A and B) Representative peaks using AKT primary antibody in normal lung and emphysema and tumour and matched normal lung, respectively. (C) Bar chart showing geometric mean total AKT and total phosphorylated AKT in benign lung and tumour tissue. (D) Correlation of total AKT signal with FDG PET/CT SUV. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. FDG, fluorodeoxyglucose RU, relative unit SUV, standardised uptake volume.

PROTEIN TARGET/ANTIBODY	
Protein Target	Akt
Protein Isoform	Unmodified
Antibody Type	Primary
Host Species/Clonality	Rabbit Polyclonal
ASSAY	
Sample Type	
Sample Concentration	Not_Stated
Antibody Concentration/Dilution	0
Antibody Diluent	
Detection Mode	Chemiluminescence
Separation Type	Size
Matrix	0
Observed kDa	0

PUBLICATIONS	
1.	Furugaki, K., Fukumura, J., et al. Impact of bevacizumab in combination with erlotinib on EGFR-mutated non-small cell lung cancer xenograft models with T790M mutation or MET amplification. <i>Int J Cancer</i> . 2016 Feb 15;138(4):1024-32. 10.1002/IJC.29848. PMID:26370161.
2.	Urasaki, Y., Fiscus, R. R., et al. Molecular classification of fatty liver by high-throughput profiling of protein post-translational modifications. <i>J Pathol</i> . 2016 Apr;238(5):641-50. 10.1002/PATH.4685. PMID:26725750.
3.	Goldsworthy, M., Bai, Y., et al. Haploinsufficiency of the Insulin Receptor in the Presence of a Splice-Site Mutation in Ppp2r2a Results in a Novel Digenic Mouse Model of Type 2 Diabetes. <i>Diabetes</i> . 2016 May;65(5):1434-46. 10.2337/DB15-1276. PMID:26868295.
4.	Crosbie PA, Crosbie EJ, Aspinall-O'Dea M, Walker M, Harrison R, Pernemalm M, Shah R, Joseph L, Booton R, Pierce A, Whetton AD. ERK and AKT phosphorylation status in lung cancer and emphysema using nanocapillary isoelectric focusing. <i>BMJ Open Respir Res</i> . 2
5.	Schrötter, S., Leonarditis, G., et al. Capillary Isoelectric Focusing of Akt Isoforms Identifies Highly Dynamic Phosphorylation in Neuronal Cells and Brain Tissue. <i>J Biol Chem</i> . 2016 May 6;291(19):10239-51. 10.1074/JBC.M115.700138. PMID:26945062.
6.	Padhan, N., Nordling, T. E., et al. High sensitivity isoelectric focusing to establish a signaling biomarker for the diagnosis of human colorectal cancer. <i>BMC Cancer</i> . 2016 Aug 25;16(1):683. 10.1186/S12885-016-2725-Z. PMID:27562229.
7.	Flowers, A., Bell-Temin, H., et al. Proteomic analysis of aged microglia: shifts in transcription, bioenergetics, and nutrient response. <i>J Neuroinflammation</i> . 2017 May 3;14(1):96. 10.1186/S12974-017-0840-7. PMID:28468668.
8.	Thompson, H. J., Jones, L. W., et al. Inherent aerobic capacity-dependent differences in breast carcinogenesis. <i>Carcinogenesis</i> . 2017 Sep 1;38(9):920-928. 10.1093/CARCIN/BGX066. PMID:28911004.
9.	Harun-Or-Rashid, M., Pappenhagen, N., et al. Structural and Functional Rescue of Chronic Metabolically Stressed Optic Nerves through Respiration. <i>J Neurosci</i> . 2018 May 30;38(22):5122-5139. 10.1523/JNEUROSCI.3652-17.2018. PMID:29760184.
10.	Otsuka, Y., Egawa, K., et al. Quercetin glycosides prevent dexamethasone-induced muscle atrophy in mice. <i>Biochem Biophys Rep</i> . 2019 Jul;18(NULL):100618. 10.1016/J.BBREP.2019.100618. PMID:30805562.
11.	Coulombe, P., Paliouras, G. N., et al. Endothelial Sash1 Is Required for Lung Maturation through Nitric Oxide Signaling. <i>Cell Rep</i> . 2019 May 7;27(6):1769-1780.e4. 10.1016/J.CELREP.2019.04.039. PMID:31067462.
12.	Zhu, M., Qin, Y. C., et al. Extracellular Glutamate-Induced mTORC1 Activation via the IR/IRS/PI3K/Akt Pathway Enhances the Expansion of Porcine Intestinal Stem Cells. <i>J Agric Food Chem</i> . 2019 Aug 28;67(34):9510-9521. 10.1021/ACS.JAFC.9B03626. PMID:31382738
13.	Presby, D. M., Checkley, L. A., et al. Regular exercise potentiates energetically expensive hepatic de novo lipogenesis during early weight regain. <i>Am J Physiol Regul Integr Comp Physiol</i> . 2019 Nov 1;317(5):R684-R695. 10.1152/AJPREGU.00074.2019. PMID:31553
14.	Castillo-Castrejon, M., Jansson, T., et al. No evidence of attenuation of placental insulin-stimulated Akt phosphorylation and amino acid transport in maternal obesity and gestational diabetes mellitus. <i>Am J Physiol Endocrinol Metab</i> . 2019 Dec 1;317(6):E10
15.	Sumi, K., Ashida, K., et al. Resistance exercise with anti-inflammatory foods attenuates skeletal muscle atrophy induced by chronic inflammation. <i>J Appl Physiol (1985)</i> . 2020 Jan 1;128(1):197-211. 10.1152/JAPPLPHYSIOL.00585.2019. PMID:31804892.

PUBLICATIONS

16. Zhai, R., Xu, H., et al. Exendin-4, a GLP-1 receptor agonist regulates retinal capillary tone and restores microvascular patency after ischaemia-reperfusion injury. *Br J Pharmacol.* 2020 Aug;177(15):3389-3402. 10.1111/BPH.15059. PMID:32232832.
17. Keleher, M. R., Erickson, K., et al. Associations between the activity of placental nutrient-sensing pathways and neonatal and postnatal metabolic health: the ECHO Healthy Start cohort. *Int J Obes (Lond).* 2020 Nov;44(11):2203-2212. 10.1038/S41366-020-0574-Y. PMID:32327723.
18. Kawasaki, K., Toshimitsu, K., et al. An Organoid Biobank of Neuroendocrine Neoplasms Enables Genotype-Phenotype Mapping. *Cell.* 2020 Nov 25;183(5):1420-1435.e21. 10.1016/J.CELL.2020.10.023. PMID:33159857.
19. Bera, A., Subramanian, M., et al. Functional role of vitronectin in breast cancer. *PLoS One.* 2020;15(11):e0242141. 10.1371/JOURNAL.PONE.0242141. PMID:33211735.-reperfusion injury. *Br J Pharmacol.* 2020 Aug;177(15):3389-3402. 10.1111/BPH.15059. PMID:32232832.
20. Mundo, W., Wolfson, G., et al. Hypoxia-induced inhibition of mTORC1 activity in the developing lung: a possible mechanism for the developmental programming of pulmonary hypertension. *Am J Physiol Heart Circ Physiol.* 2021 Mar 1;320(3):H980-H990. 10.1152/AJPHEART.00520.2020. PMID:33416457.

This antibody is certified for Gel-Free, Blot Free, Hands Free Simple Western Systems. To learn about Simple Western Systems, available Simple Western antibodies, or new antibody submissions visit the links below. For additional information, please contact support@proteinsimple.com.

[Simple Western Systems](#)

[Simple Western Antibody Database](#)

[Simple Western Antibody Submission](#)

PAGE 3/3

bio-techne[®]

bio-techne.com

Global info@bio-techne.com bio-techne.com/find-us/distributors TEL +1 612 379 2956
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373

Trademarks and registered trademarks are the property of their respective owners.