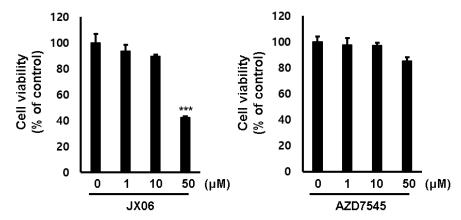




1 Supplementary Materials



Supplementary Figure S1. The cell viabilities of JX06, and AZD7545 in A549 cells. The cells were treated with JX06, and AZD7545 for 24 h. All experiments were performed at least three times, and data shown as the mean \pm SD. Statistical analyses were performed using Student's t-test. ****, p < 0.001 compared with the control.

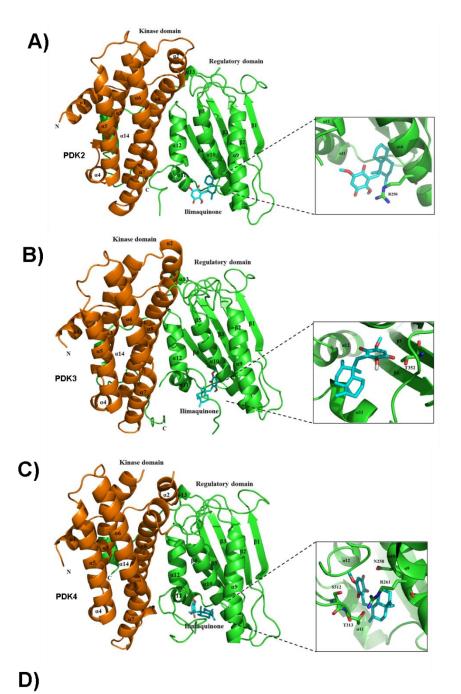
A549 Lenti- CRISPR-PDHA1

PDHA1

β-actin

Supplementary Figure S2. Construction of PDHA1-knockout A549 cells. The A549 cells were infected with lentivirus harboring mock CRISPR vector or PDHA1-knockout vector. The protein expression levels of PDHA1 were determined via western blotting.

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PDK1 MVFELFKNAMRATMEHHANRG-VYPPIQVHVTLGNEDLTVKMSDRGGGVPLRKIDRLFNYMYSTAPRPRVETSRAVPLAGFGYGLP
PDK2 MLFELFKNAMRATVESHESSL-ILPPIKVMVALGEEDLSIKMSDRGGGVPLRKIERLFSYMYSTAPTPQPGTG-GTPLAGFGYGLP
PDK3 MLFELFKNSMRATVELYEDRKEGYPAVKTLVTLGKEDLSIKISDLGGGVPLRKIDRLFNYMYSTAPRPSLEPTRAAPLAGFGYGLP
PDK4 MLFELFKNAMRATVEHQENQP-SLTPIEVIVVLGKEDLTIKISDRGGGVPLRIIDRLFSYTYSTAPTPVMDNSRNAPLAGFGYGLP

ATP binding site IQ binding residue (predicted

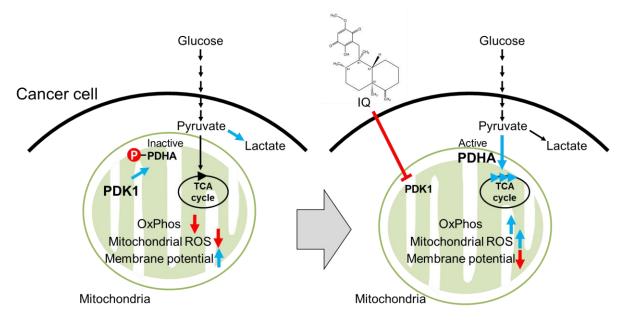
Supplementary Figure S3. The interaction of PDK isozymes with IQ. The modeled structures of PDK isoforms 2 (PDB ID: 2BTZ), 3 (PDB ID:1Y8N), and 4 (PDB ID: 2E0A) with IQ (CID: 21727418) are shown as ribbons. The interaction residues between a PDK isoform and IQ are shown.

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Supplementary Figure S4. Schematic diagram of the mechanism of IQ-mediated apoptosis. The red circle and white P indicate phosphates.