

1 **High-dose Ascorbate Exhibits Anti-proliferative and Anti-invasive Effects Dependent on**
2 **PTEN/AKT/mTOR Pathway in Endometrial Cancer *in vitro* and *in vivo***

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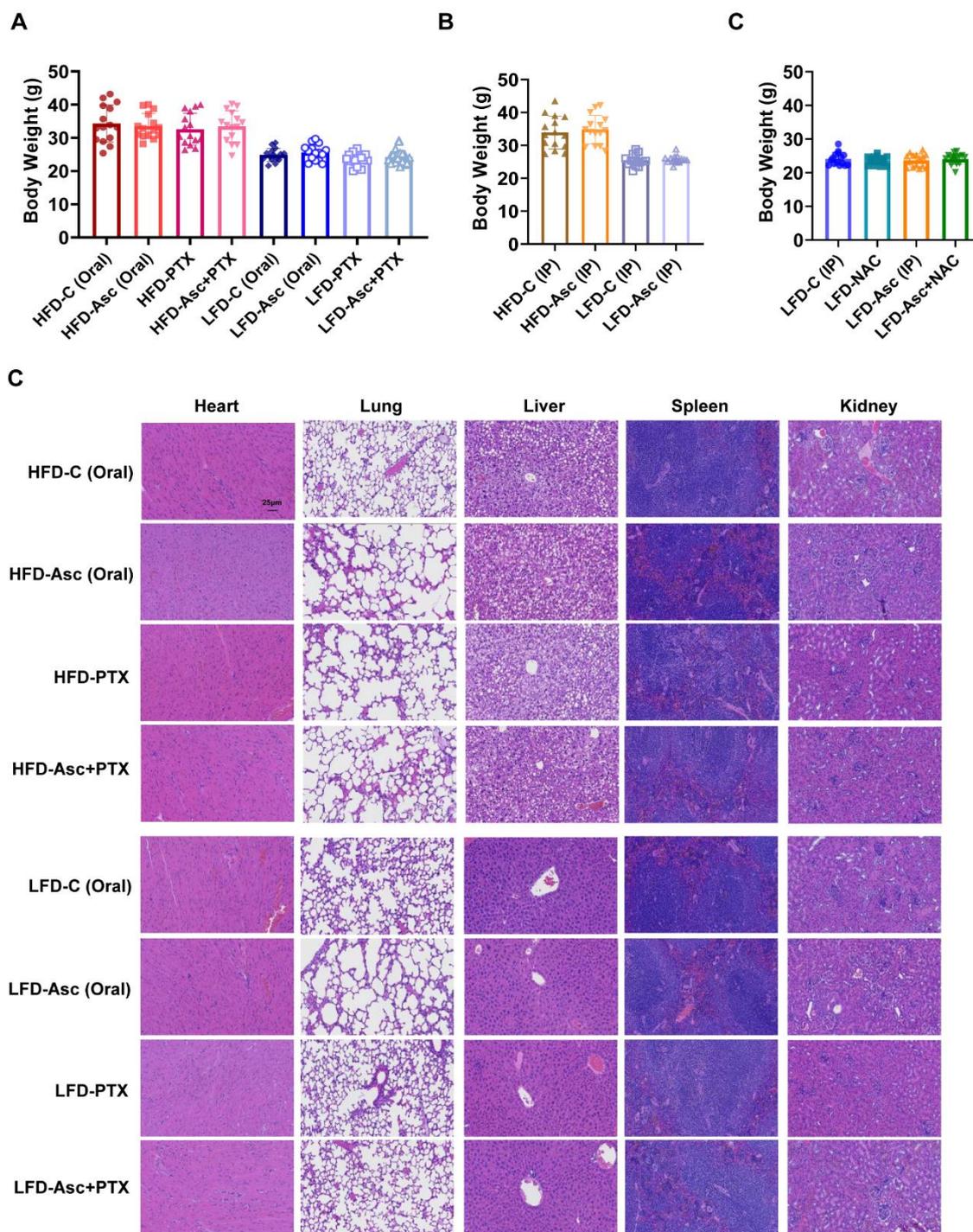
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35 **Supplementary Table 1** Statistical comparison of IC50 of six cell lines

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Names	IC50 (mM) ± SD	KLE	Hec-1B	Ishikawa	RL-952	AN3CA	EC-023
KLE	1.78 ± 0.26	-	ns	ns	**	*	*
Hec-1B	1.94 ± 0.21		-	ns	**	*	*
Ishikawa	2.95 ± 0.88			-	ns	**	**
RL-952	3.66 ± 0.57				-	**	**
AN3CA	0.48 ± 0.07					-	ns
EC-023	0.33 ± 0.25						-

37 * $p < 0.05$, ** $p < 0.01$, ns: not significant.

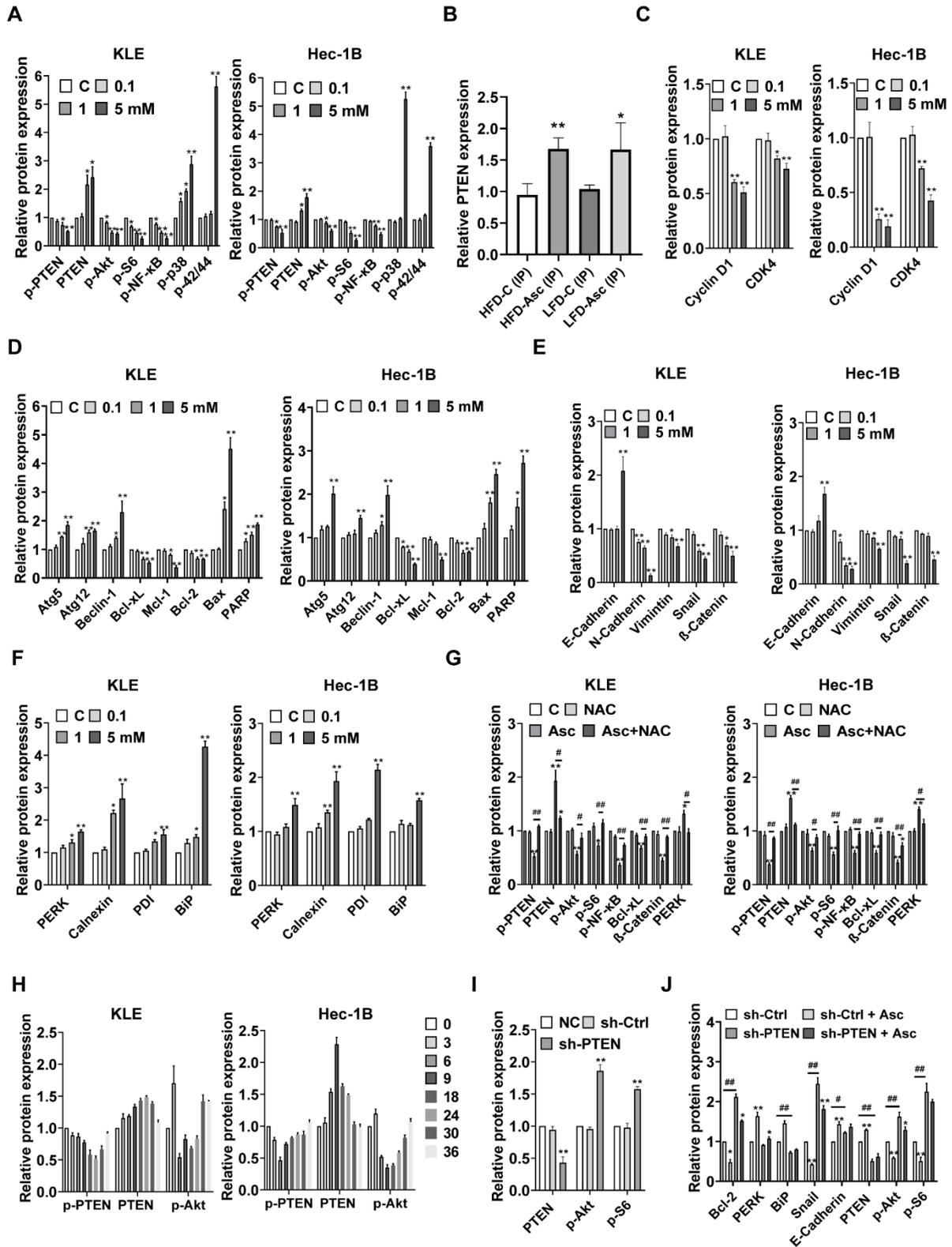


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39 **Supplementary Figure 1. The safety profiles of ascorbate in *LKB1^{fl/fl}p53^{fl/fl}*-transgenic**
 40 **mouse model**

41 The body weight of mice was measured once a week. Results indicate that ascorbate treatment
 42 (oral and IP) or combined with paclitaxel for 4 weeks had no significant impact on body weight
 43 in both HFD and LFD groups (A, B). The administration of NAC alone or combined with
 44 ascorbate (IP) for 4 weeks did not affect the body weight in the LFD group (C). H&E staining

45 of tissues from the heart, lung, liver, spleen, and kidney demonstrated no morphological
46 changes in major organs after treatment of ascorbate, paclitaxel, and the combination for 4
47 weeks in the HFD and LFD groups (D). Asc: Ascorbate, HFD: High-fat diet, LFD: Low-fat
48 diet. C (Oral) = Vehicle control for oral administration group, C (IP) = Vehicle control for IP
49 injection group.



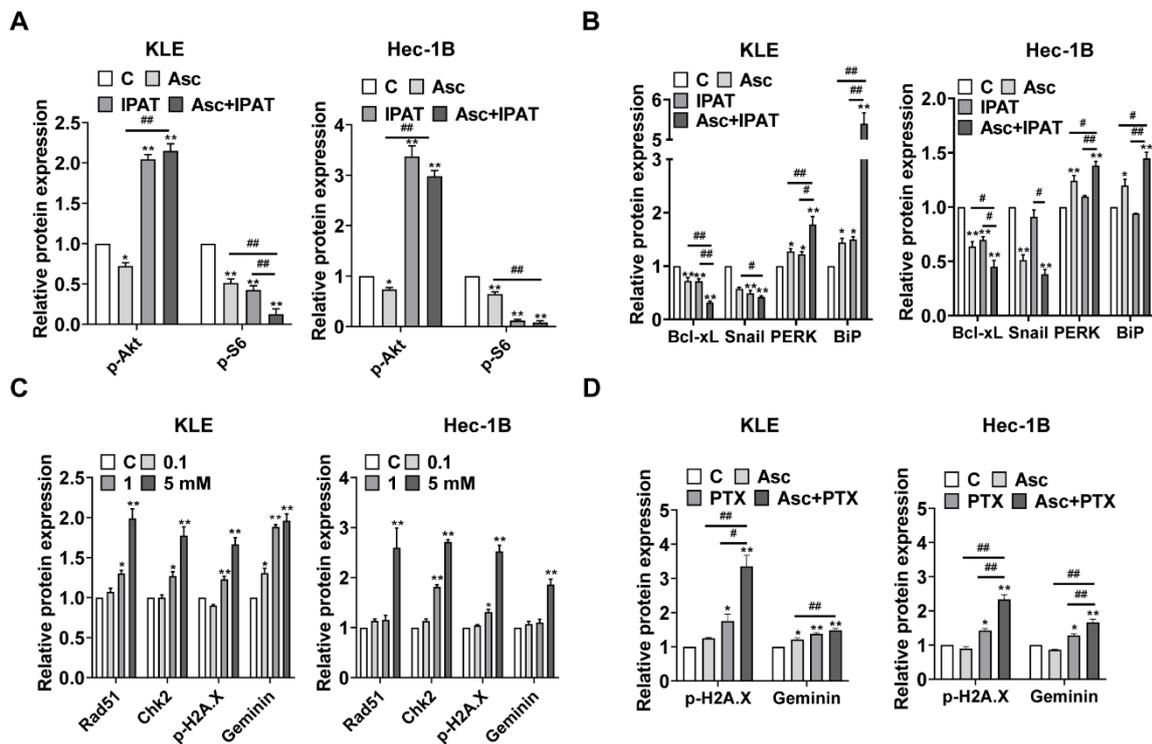
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51 **Supplementary Figure 2. The quantitative analysis for Western blotting (Figure 1 to**
 52 **Figure 5)**

53 The quantitative analysis of protein expression for western blotting was conducted using image

54 Lab software and normalized to appropriate internal controls. The quantitative analysis for

55 Figure 1E (A, B). The quantitative analysis for Figure 2B (C). The quantitative analysis for
 56 Figure 2C (D). The quantitative analysis for Figure 3D (E). The quantitative analysis for Figure
 57 4E (F). The quantitative analysis for Figure 4L (G). The quantitative analysis for Figure 5A (H).
 58 The quantitative analysis for Figure 5B (I). The quantitative analysis for Figure 5H (J). Asc:
 59 Ascorbate, HFD: High-fat diet, LFD: Low-fat diet. C (IP) = Vehicle control for IP injection
 60 group. * $p < 0.05$, ** $p < 0.01$ compared with C or vehicle control. # $p < 0.05$, ## $p < 0.01$ compared
 61 with each group.



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63 **Supplementary Figure 3. The quantitative analysis for Western blotting (Figure 6 to**
 64 **Figure 7)**

65 The quantitative analysis of protein expression for western blotting was conducted using image
 66 Lab software and normalized to appropriate internal controls. The quantitative analysis for
 67 Figure 6D (A). The quantitative analysis for Figure 6H (B). The quantitative analysis for Figure
 68 7A (C). The quantitative analysis for Figure 7F (D). Asc: Ascorbate, * $p < 0.05$, ** $p < 0.01$
 69 compared with C. # $p < 0.05$, ## $p < 0.01$ compared with each group.