**Supplementary Table 1. Primary antibody for western blotting**

|  |  |  |
| --- | --- | --- |
| **Antibody** | **Company(#cat)** | **Dilution factor** |
| phospho-CHK1 (S345) | Cell Signaling Technology (#2348) | 1:500 |
| CHK1 | Cell Signaling Technology (#2360) | 1:500 |
| phospho-CHK2 (Thr68) | Cell Signaling Technology (#2197) | 1:500 |
| CHK2 | Cell Signaling Technology (#3440) | 1:500 |
| γH2AX | Cell Signaling Technology (#2577) | 1:500 |
| HSP90 | Invitrogen (#PA3-013) | 1:1000 |
| α-tubulin | Sigma-Aldrich (#T9026) | 1:2000 |
| CD16/CD32 | eBioscience (#62-0161-82) |  |
| Sca-1-PE | eBioscience (#12-5981-82) |  |
| CD45-APC | eBioscience (#17-0451-82) |  |

**Supplementary Table 2. Taqman probe for qRT-PCR analysis**

|  |  |  |
| --- | --- | --- |
| **Gene** | **Probe number** | **Strain** |
| Lipoprotein lipase (*LPL*) | Hs00173425\_m1 | Human |
| Adiponectin (*ADIPOQ*) | Hs00605917\_m1 | Human |
| Leptin (*LEP*) | Hs00174877\_m1 | Human |
| Peroxisome proliferator-activated receptor gamma (*PPARG*) | Hs01115513\_m1 | Human |
| Interleukin-6 (*IL-6*) | Hs00985639\_m1 | Human |
| CC chemokine ligands (*CCL2*) | Hs00234140\_m1 | Human |
| Peptidyl-prolyl cis/trans isomerase a (*PPIA*) | Hs04194521\_s1 | Human |

**Supplementary Table 3. Body weight gain, food intake, and energy intake of mice fed different diets**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Group** | **SC+****CON (n=10)** | **HF+****CON (n=10)** | **SC+****Cur (n=10)** | **HF+****Cur (n=10)** |
| **Body weight** |  |  |  |  |
| Initial body weight (g) | 20.31±0.55 | 20.67±0.94 | 20.26±0.69 | 20.62±0.82 |
| body weight (4wks post) (g) | 25.98±0.95a | 31.73±2.81b | 26.25±3.50a | 29.99±2.85C |
| Weight gain (g) | 5.66±0.80 a | 11.05±2.51b | 5.99±3.16a | 9.37±2.57C |
| **Food intake** |  |  |  |  |
| Food intake (g/day) | 3.08±0.12 | 2.82±0.04 | 3.16±0.82 | 2.91±0.19 |
| Energy intake (kcal/day) | 11.82±0.46a | 16.35±0.19b | 11.95±3.80a | 16.48±0.89b |
|  |  |  |  |  |

Data are mean$\pm $SD. SC(Low-fat diet, 10kcal% from fat); HF(High-fat diet, 60kcal% from fat); SC+Cur(Low-fat diet +Curucmin); HF+curcumin(High-fat diet+curcumin). Significant differences were determined using a one-way analysis of variance (ANOVA) followed by Duncan’s post hoc test. Different superscripts indicate significant difference (p<0.05).