

Figure S1. EDS spectrum of the three-butterfly wings: (a), (b) and (c) are EDS spectrums of *M. menelaus*, *P. u. telegonus* and *O. c. lydius* wings respectively after hydrophilic treatment; (d), (e) and (f) are the EDS spectrum of *M. menelaus*, *P. u. telegonus* and *O. c. lydius* wings respectively after the acidic/basic treatment. (g) is the schematic flowchart of the butterfly wing composition throughout the treatment process.

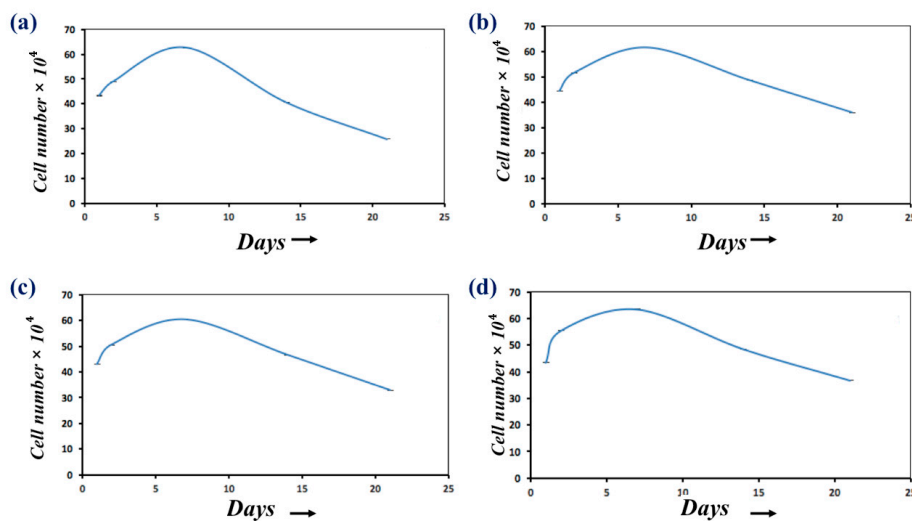


Figure S2. MTT activity assay of NIH-3T3 cells cultured on (a) *M. menelaus* wing, (b) *P. u. telegonus* wing (blue region), (c) *P. u. telegonus* wing (fiber region) and (d) *O. c. lydius* wing over 3-weeks.