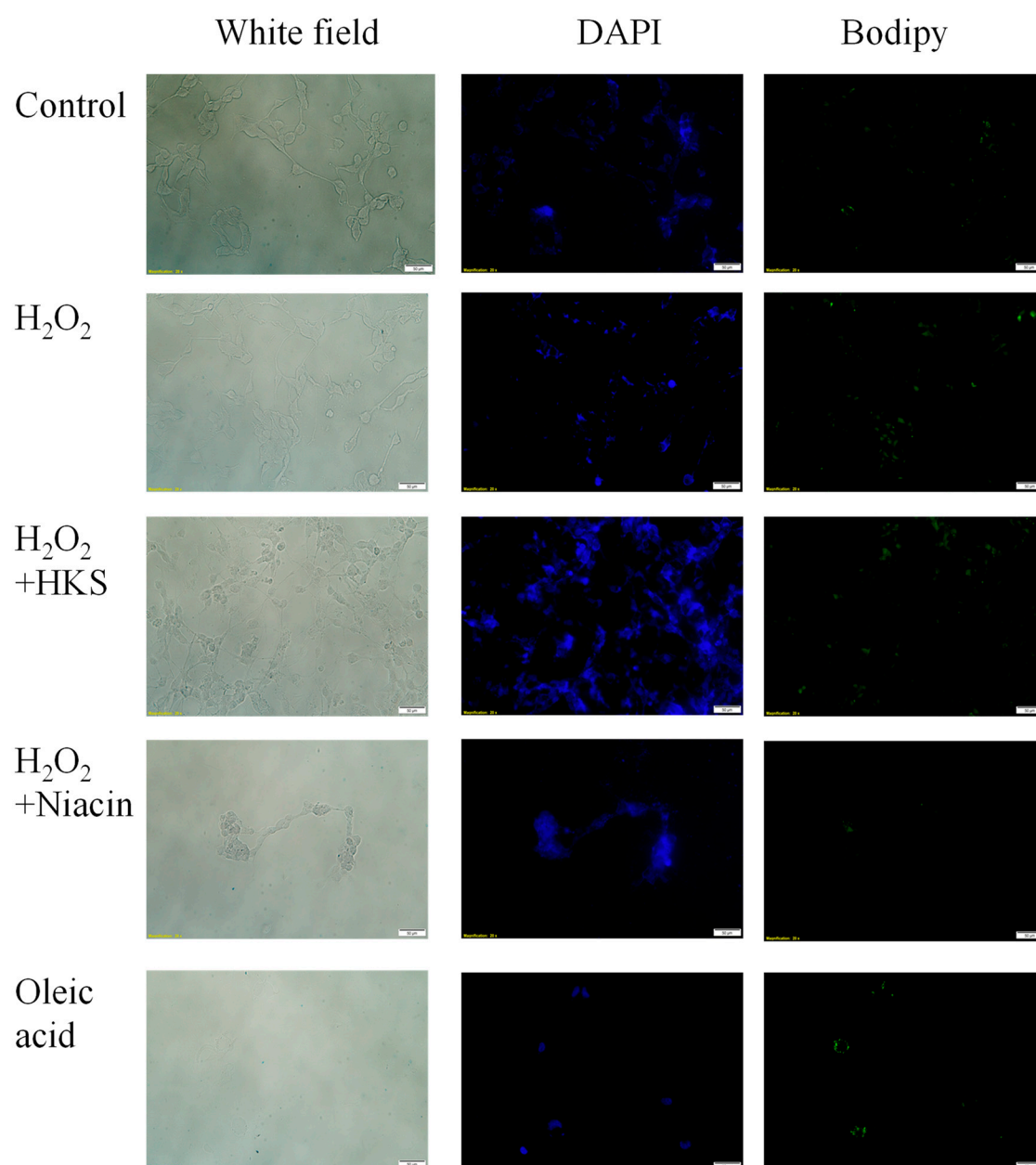


**Table S1.** List of metabolites and internal standard.

Compounds	Abbreviation	Polarity	Precursor (m/z)	Product (m/z)	Collision energy (V)	CAS registry number
nicotinic acid	NA	Positive	124.05	78.042	21.47	59-67-6
nicotinamide	NAM	Positive	123.05	80.071	19.91	98-92-0
nicotinamide riboside	NR	Positive	255.093	123.071	10.77	1341-23-7
nicotinamide adenine dinucleo- tide	NAD <sup>+</sup>	Positive	664.071	427.97	26.06	53-84-9

**Table S2.** List of human gene primers used for PCR reactions.

Plin1	forward	5'-AGTCCAGGCCTGTGTGCTTTG-3'
	reverse	5'-GTGACTATGCAGGTGAAGGCAGTAA-3'
Plin2	forward	5'-TTCGCCTTTCGCTGCAGTC-3'
	reverse	5'-CCGAGTCACCACACTCTGCAAT-3'
Plin3	forward	5'-GCAAGCTTCGAGCCACCAA-3'
	reverse	5'-GGTTCCAGCTGAGCCACATC-3'
Plin4	forward	5'-GGAGCTGCAACCTTCGGAAA-3'
	reverse	5'-ATCCTTGGCCCTGGACATCT-3'
Plin5	forward	5'-TGCTGCTCAGCCTGCCATAC-3'
	reverse	5'-AGGACCTTTATTCTGGAGGCAAATC-3'
GAPDH	forward	5'-GCACCGTCAAGGCTGAGAAC-3'
	reverse	5'-TGGTGAAGACGCCAGTGGA-3'
IL-6	forward	5'-AAGCCAGAGCTGTGCAGATGAGTA-3'
	reverse	5'-TGTCTGCAGCCACTGGTTC-3'



Supplementary Figure S1. Visualization of lipid droplets.

SH-SY5Y cells were exposed for 24 h to HKS (*B. breve* MCC1274 heat-killed cell extracts at 1% final v/v) or niacin (100 nM), with or without (PBS only as the control) H<sub>2</sub>O<sub>2</sub> (200 µM) and then stained with DAPI or bodipy (2 µM). Oleic acid was used as a control to confirm the induction of lipid droplets (60 µM).