

Chemicals

Folin-Ciocalteu reagent, gallic acid, quercetin, sodium sulphate, trans-cinnamaldehyde and trans-cinnamic acid were purchased from Sigma-Aldrich (Germany). Aluminum chloride, DMSO and potassium acetate were purchased from Carlo Erba (Germany). 2-Methyltetrahydrofuran (2-MeTHF), ethanol, dichloromethane (DCM), hexane, potassium chloride, sodium acetate and sodium carbonate were purchased from Merck (Germany). All chemicals were of analytical grade. Water was produced with Stakpure Omnia Type I Ultrapure Water Systems (Germany).

Table S1. Dose-response values of trichostatin A for the calculation of IC₅₀

Trichostatin A	Dose (nM)	% Inhibition	Standard Deviation	%RSD
	4940	100.000	2.083	2.083
	1235	99.990	5.882	5.883
	123	74.435	3.048	4.095
	12	26.048	3.223	12.373
	1	9.978	1.778	17.819

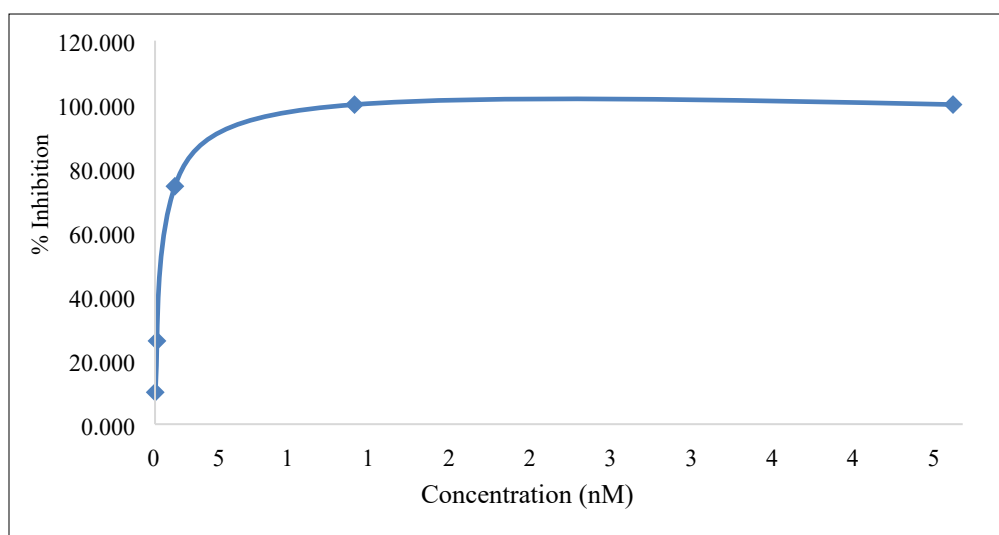


Fig.S1 Dose-response curve of trichostatin A for HDAC 1 inhibitory activity

Table S2. Dose-response values of 70% ethanol extract for the calculation of IC₅₀

70% Ethanol Extract	Dose (µg/ml)	% Inhibition	Standard Deviation	%RSD
	1000	90.400	2.405	2.660
	250	63.610	2.179	3.426
	50	37.686	0.724	1.921

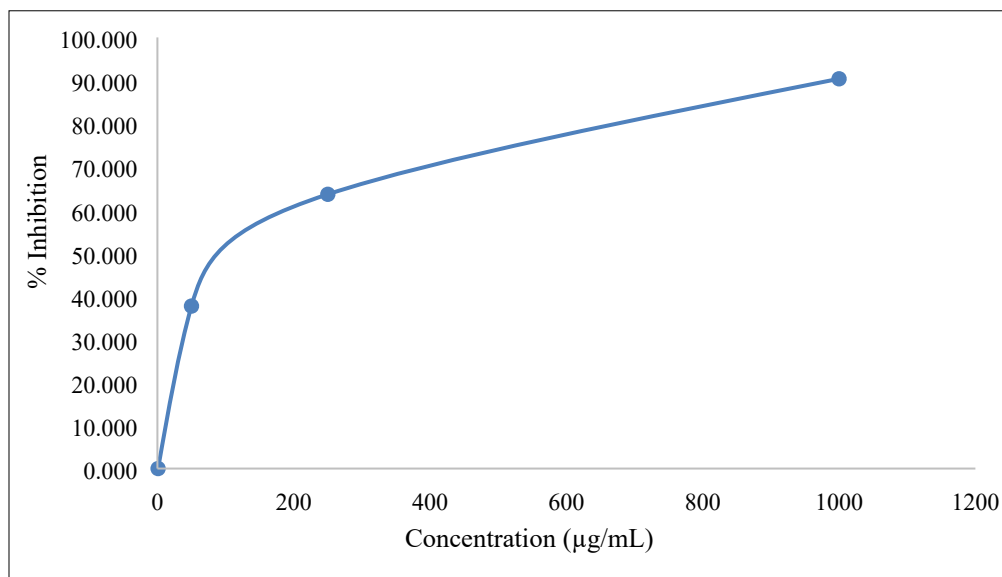


Fig.S2 Dose-response curve of 70% ethanol extract for HDAC 1 inhibitory activity

Table S3. Dose-response values of essential oil for the calculation of IC₅₀

Essential Oil	Dose (µg/ml)	% Inhibition	Standard Deviation	%RSD
	1000	85.590	1.793	2.095
	250	51.115	2.493	4.877
	50	49.622	0.842	1.697

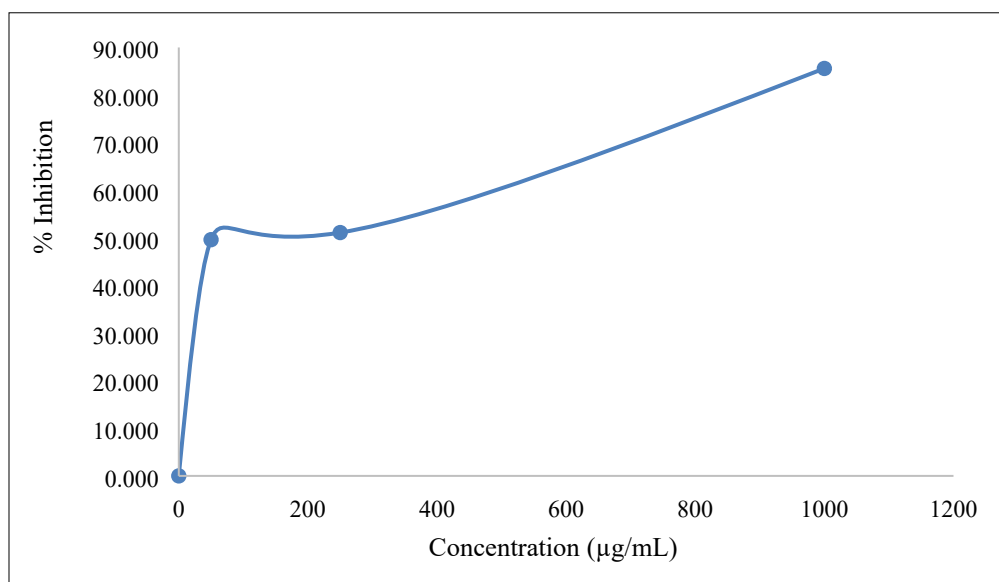


Fig.S3 Dose-response curve of essential oil for HDAC 1 inhibitory activity

Table S4. Dose-response values of trans-Cinnamic acid for the calculation of IC₅₀

trans-Cinnamic acid	Dose (µg/ml)	% Inhibition	Standard Deviation	%RSD
	47.500	76.987	1.999	2.597
	11.875	53.126	2.771	5.216
	2.969	33.970	0.096	0.283

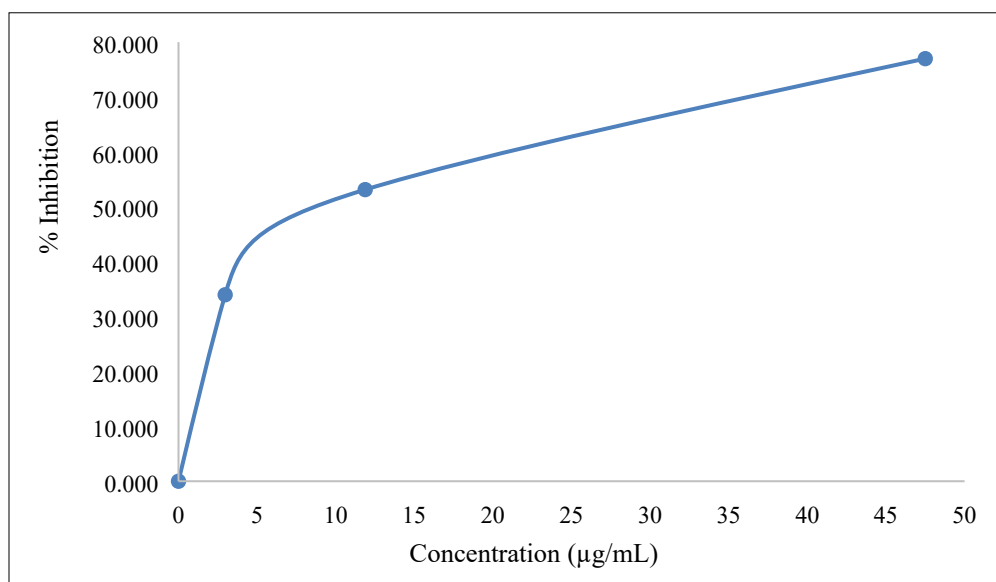


Fig.S4 Dose-response curve of trans-Cinnamic acid for HDAC 1 inhibitory activity

Table S5. Dose-response values of trans-Cinnamaldehyde for the calculation of IC₅₀

trans-Cinnamaldehyde	Dose (µg/ml)	% Inhibition	Standard Deviation	%RSD
	47.500	75.318	1.900	2.523
	11.875	64.301	1.191	1.852
	2.969	30.700	0.949	3.091

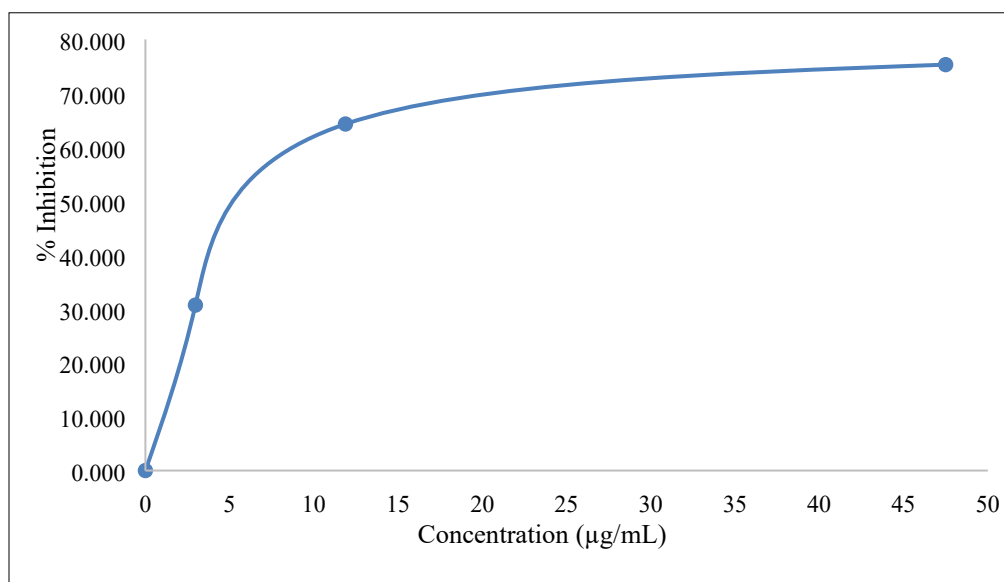


Fig.S5 Dose-response curve of trans-Cinnamaldehyde for HDAC 1 inhibitory activity