Deciphering the Potential of *Cymbopogon citratus* (DC.) Stapf as an Anti-Obesity Agent: Phytochemical Profiling, *in Vivo* Evaluations and Molecular Docking Studies

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Table S1 Pearson´s correlation of the evaluated parameters in the studied groups

	Glucose	Insulin	HOMA-IR	Cholesterol	TG	HDL	LDL	Apelin	Adiponectin	Apelin gene	APJ	Adiponectin gene
Glucose	---------	-0.560**	0.590**	0.927**	0.937**	-0.950**	0.898**	-0.829**	-0.882**	-0.755**	-0.820**	-0.730**
Insulin	-0.560**	--------	0.231	-0.537**	-0.546**	0.594**	-0.576**	0.545**	0.599**	0.541**	0.524**	0.516**
HOMA-IR	0.590**	0.231	---------	0.600**	0.575**	-0.548**	0.526**	-0.483**	-0.525**	-0.444**	-0.483**	-0.457**
Cholesterol	0.927**	-0.537**	0.600**	----------	0.934**	-0.966**	0.972**	-0.898**	-0.940**	-0.829**	-0.860**	-0.812**
TG	0.937**	-0.546**	0.575**	0.934**	----	-0.956**	0.920**	-0.881**	-0.892**	-0.778**	-0.820**	-0.758**
HDL	-0.950**	0.594**	-0.548**	-0.966**	-0.956**	------	-0.950**	0.889**	0.921**	0.830**	0.879**	0.817**
LDL	0.898**	-0.576**	0.526**	0.972**	0.920**	-0.950**	-----	-0.883**	-0.931**	-0.824**	-0.853**	-0.826**
Apelin	-0.829**	0.545**	-0.483**	-0.898**	-0.881**	0.889**	-0.883**	--------	0.865**	0.826**	0.836**	0.774**
Adiponectin	-0.882**	0.599**	-0.525**	-0.940**	-0.892**	0.921**	-0.931**	0.865**	---------	0.846**	0.849**	0.852**
Apelin gene	-0.755**	0.541**	-0.444**	-0.829**	-0.778**	0.830**	-0.824**	0.826**	0.846**	--------	0.950**	0.924**
APJ	-0.820**	0.524**	-0.483**	-0.860**	-0.820**	0.879**	-0.853**	0.836**	0.849**	0.950**	----	0.888**
Adiponectin gene	-0.730**	0.516**	-0.457**	-0.812**	-0.758**	0.817**	-0.826**	0.774**	0.852**	0.924**	0.888**	---------

* p<0.05 - ** p<0.001

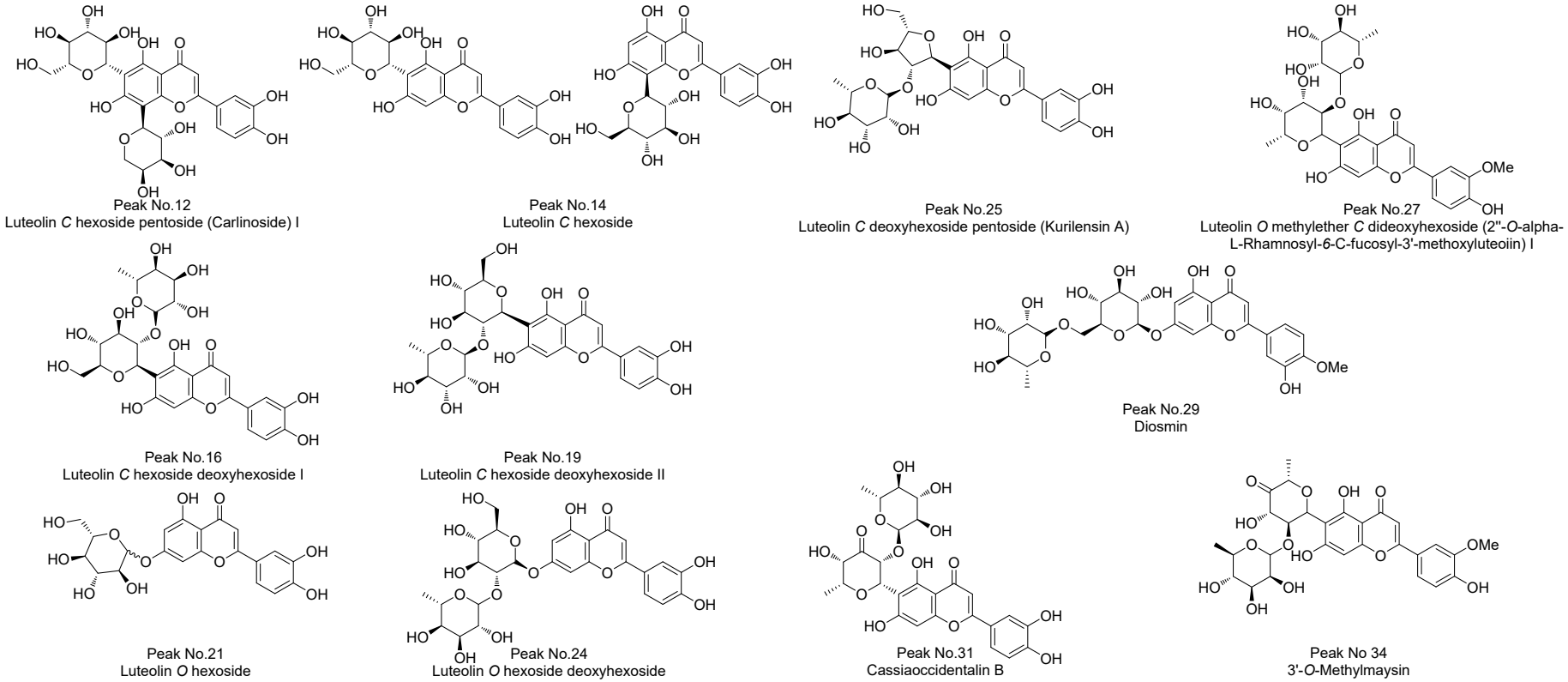
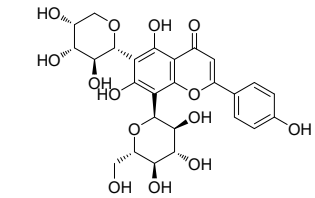
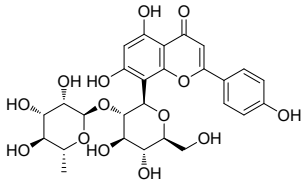


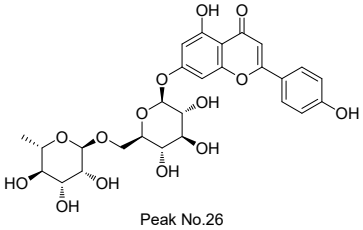
Fig. S1. Detected Flavones (luteolin) derivatives in the examined extract.



Peak No.15
Apigenin *C*-pentoside hexoside (Isoschaftoside)

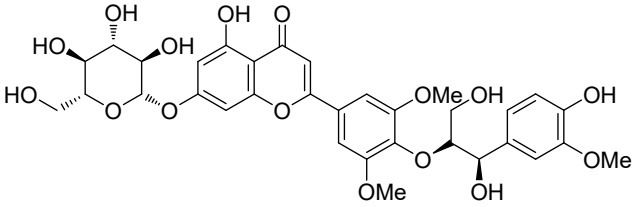


Peak No.20
Apigenin *C* hexoside deoxyhexoside



Peak No.26
Apigenin *O* hexoside deoxyhexoside

Fig. S2. Detected Flavones (apigenin) derivatives in the examined extract.



Peaks No.37 & 40
Tricin 4-*O*-(β-guaiacyl-glyceryl)ether I & II

Fig. S3. Detected Flavones (tricin) derivatives in the examined extract.

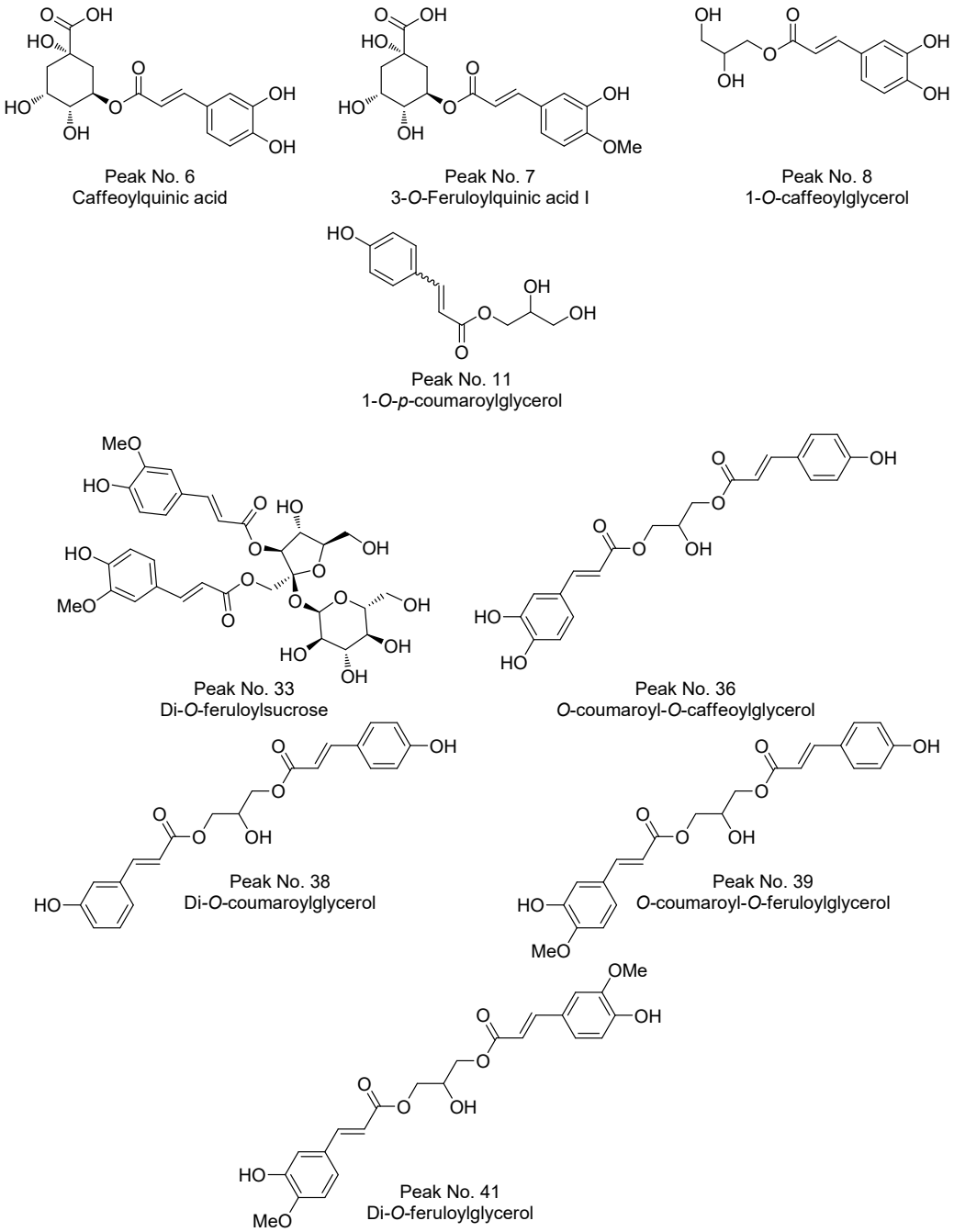


Fig. S4. Detected hydroxycinnamic acid derivatives in the examined extract.

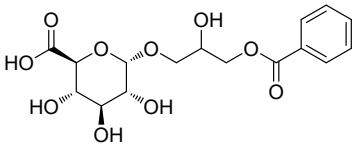


Fig. S5. Detected hydroxybenzoic acids derivatives in the examined extract.

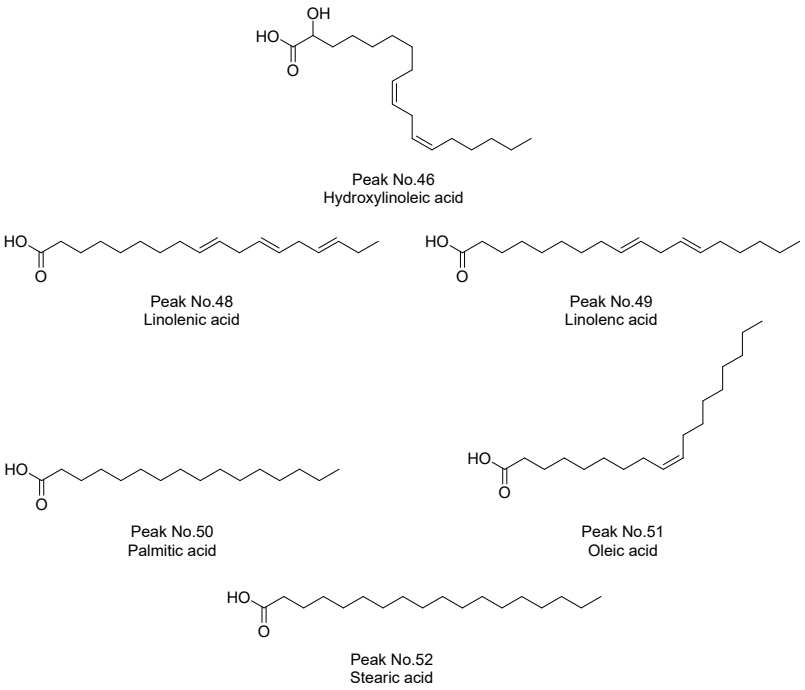


Fig. S6. Detected fatty acids in the examined extract.

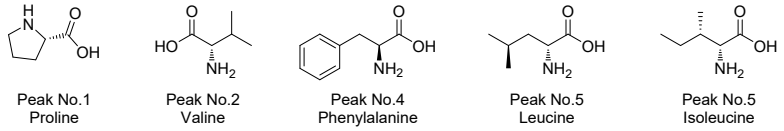


Fig. S7. Detected amino acids in the examined extract.

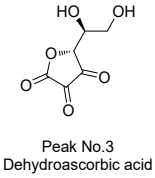


Fig. S8. Detected organic acids in the examined extract.

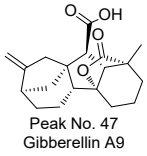


Fig. S9. Detected diterpenoid in the examined extract.

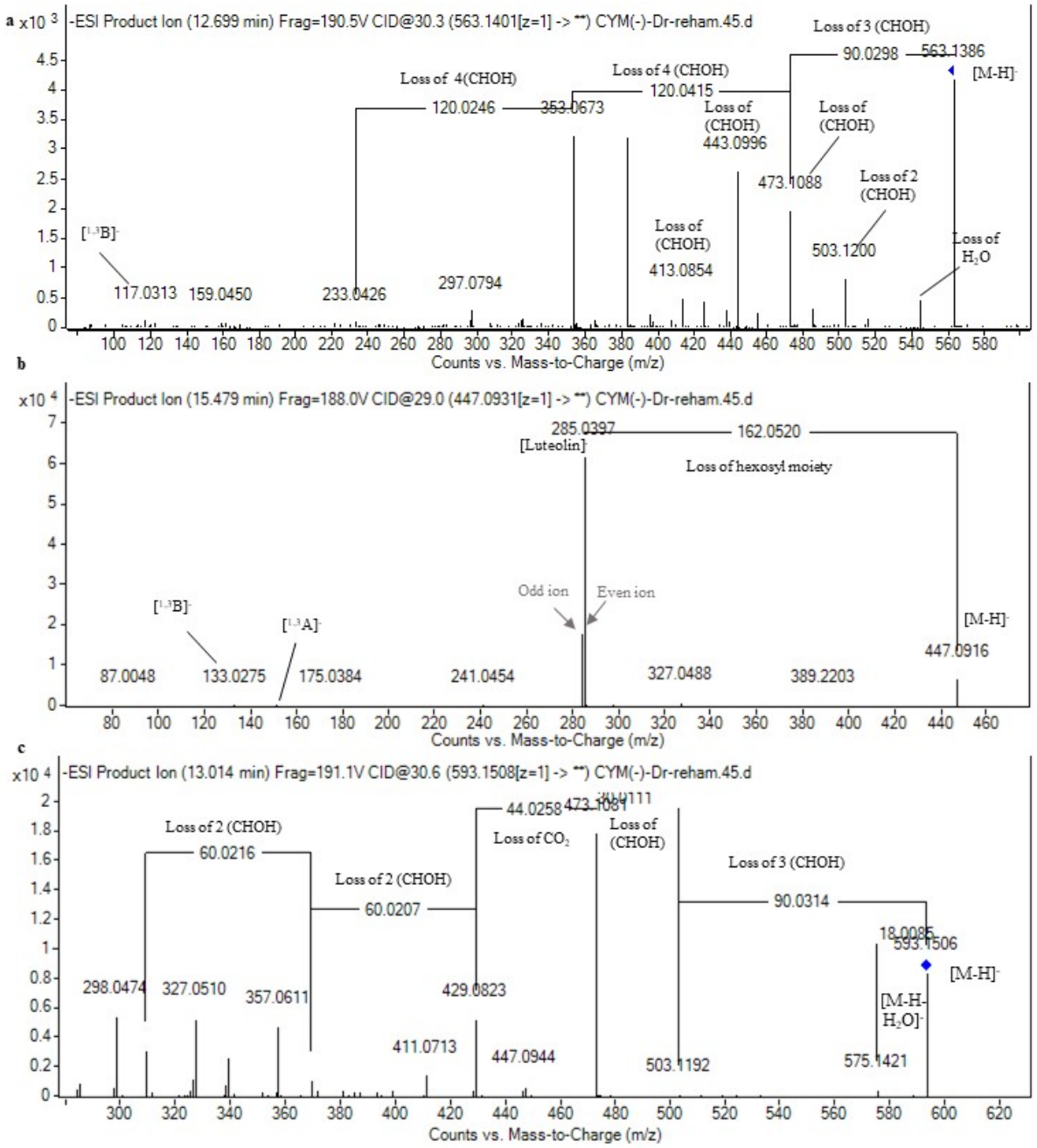


Fig. S10. Pattern of fragmentation of **a**) apigenin *C*-pentoside hexoside, **b**) luteolin *O* hexoside, **c**) luteolin *C* deoxyhexoside hexoside.

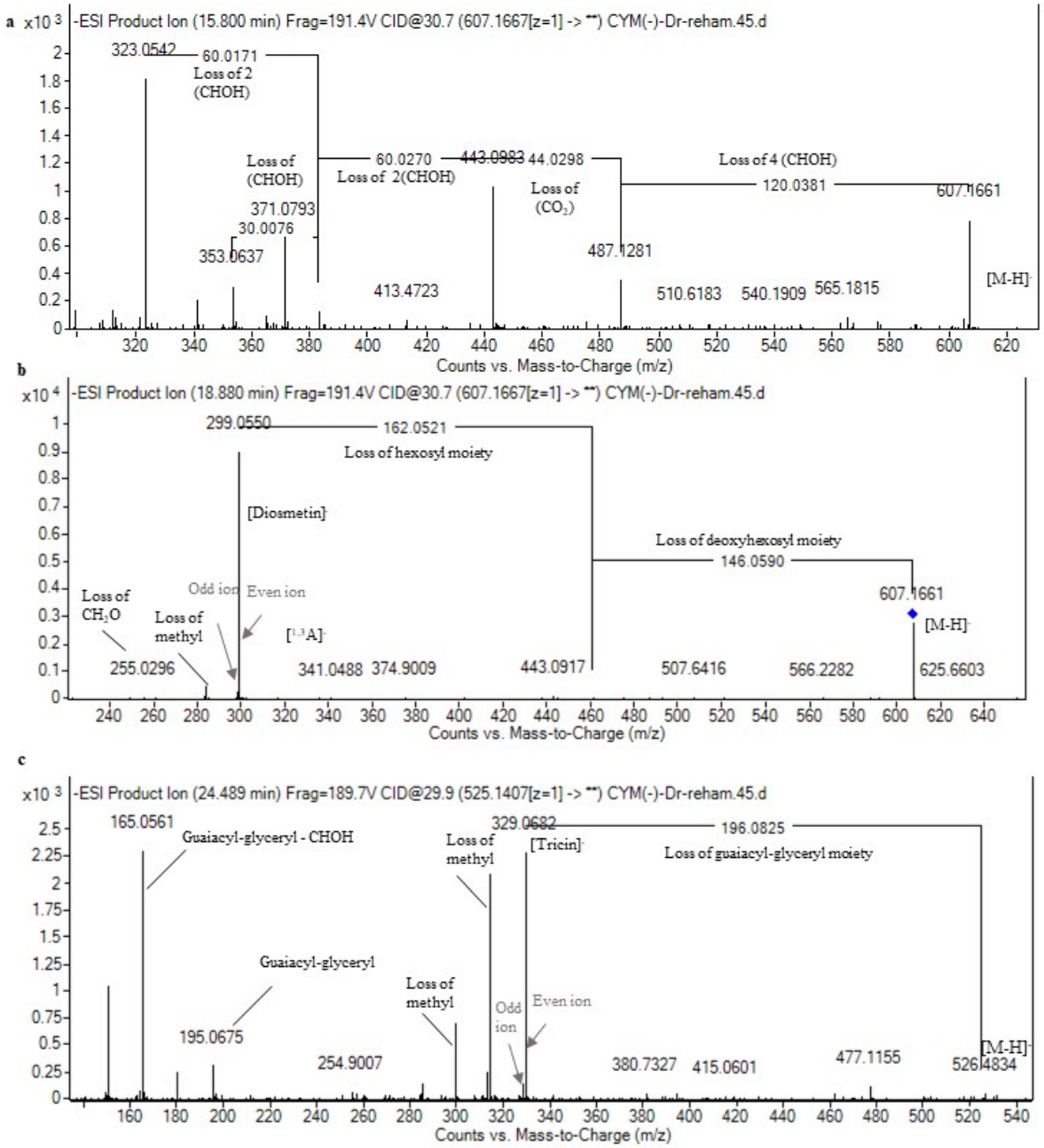


Fig. S11. Pattern of fragmentation of **a**) diosmetin *C*-deoxyhexoside hexoside, **b**) diosmetin *O*-deoxyhexoside hexoside, **c**) tricin 4′-*O*-(β-guaiacyl-glyceryl) ether I.

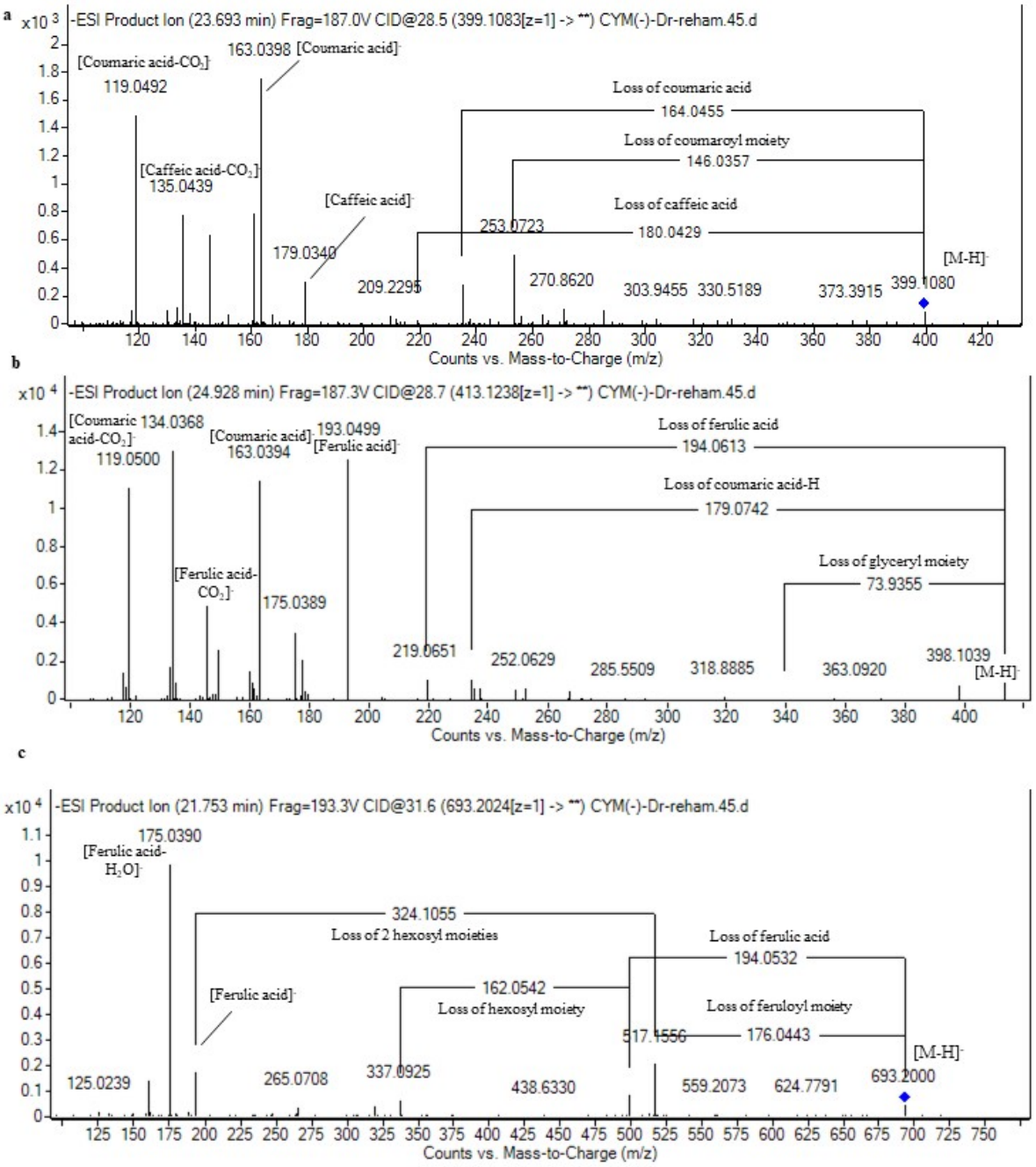


Fig. S12. Pattern of fragmentation of **a**) *O*-coumaroyl-*O*-caffeoylglycerol, **b**) *O*-coumaroyl-*O*-feruloylglycerol, **c**) Di-*O*-feruloylsucrose.

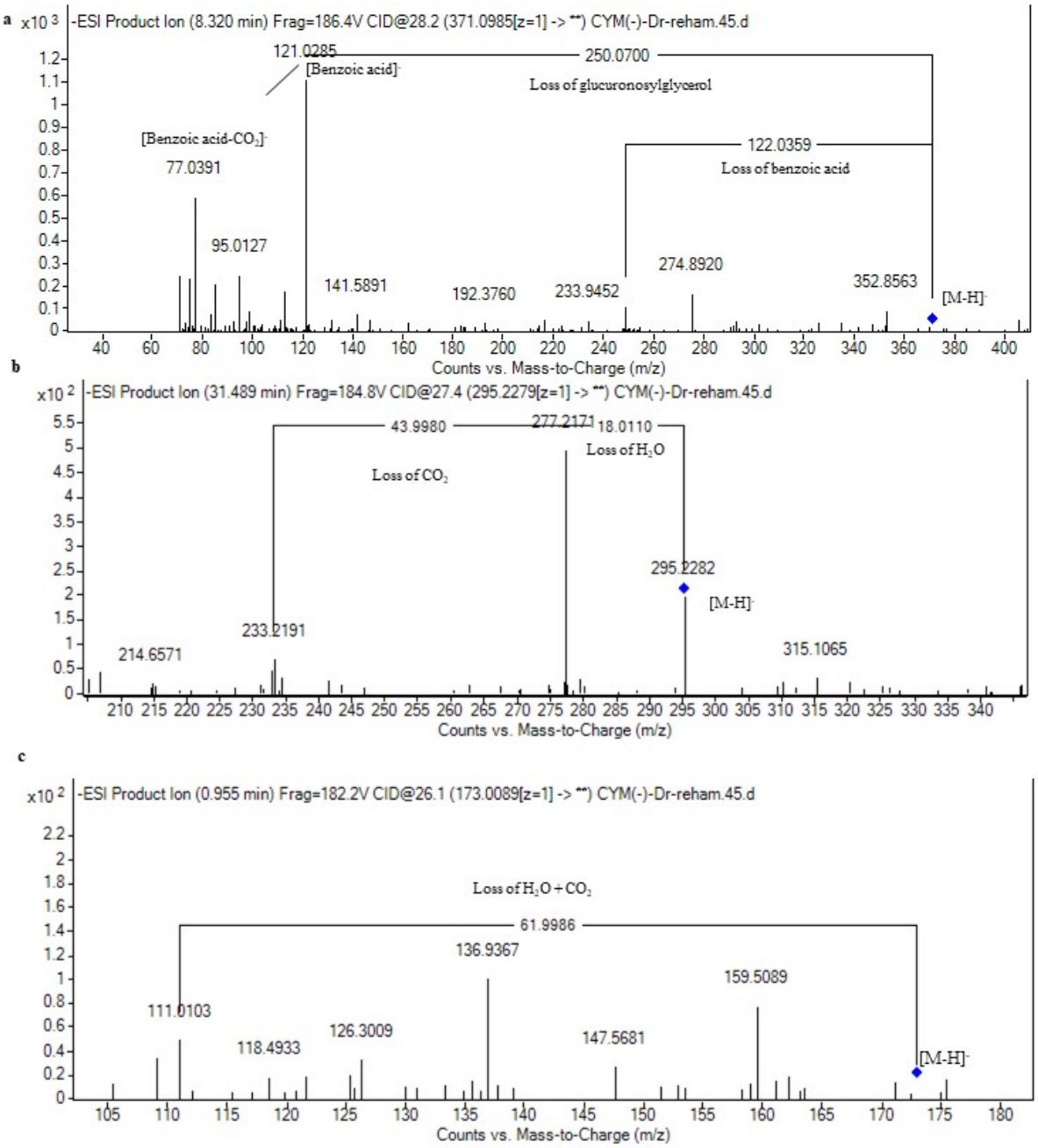


Fig. S13. Pattern of fragmentation of **a**)1-*O*-benzoyl-3-α-glucuronosylglycerol, **b**) hydroxylinoleic acid l, **c**) dehydroascorbic acid.