

Table S1. List of analyzed products with ingredients listed as labeled

Finished product	Analyt of interest	Ingredients
Apipharma, Kapsin ointment	capsaicinoids / camphor	Active components: Capsicum oleoresin (300 µg /g ointment), Camphor (31600 µg /g ointment), Inactive ingrediants: Petrolatum, Lanolin Cera, Alcohol, Aqua, Propolis Cera
Apipharma, Kapsin ointment	capsaicinoids / camphor	Petrolatum, Lanolin Cera, Alcohol, Aqua, Propolis Cera, Capsicum extract, Camphor
Apipharma, Propireumin	camphor	Petrolatum, Lanolin Cera, Alcohol, Aqua, Propolis Cera, Menthol, Camphor
Biovitalis, Paprika gel	capsaicinoids / camphor	Aqua, glycerin, camphor , methyl salicylate, capsicum frutescens resin , rosmarinus officinalis leaf oil, gaultheria procumbens leaf oil, sodium hydroxide, carbomer, benzyl alcohol, dehydroacetic acid, CI 16255, limonene, linalool
Dr. Theiss, Allga San Mobil Creme	capsaicinoids / camphor	Aqua, Alcohol Denat., Cetearyl Alcohol, Glyceryl Stearate Citrate, Sucrose Stearate, Hydrogenated Polydecene, Dicaprylyl Ether, Simmondsia Chinensis Seed Oil, Ricinus Communis Seed Oil, Pentylene Glycol, Glycerin, Panthenol, Tocopheryl Acetate, Vanillyl Butyl Ether, Phenoxyethanol, Symphytum Officinale Extract, Rosmarinus Officinalis Leaf Oil, Hydrogenated Castor Oil, Pinus Mugo Leaf Oil, Camphor , Parfum, Carbomer, Allantoin, Sodium Hydroxide, Ethylhexylglycerin, Benzyl Nicotinate, Capsicum Frutescens Oleoresin , Helianthus Annuus Seed Oil, Limonene, Linalool
Dr. Theiss, Allga San Mobil Fluid	capsaicinoids	Aqua, Alcohol Denat., PEG-60 Hydrogenated Castor Oil, Vanillyl Buthyl Ether, Symphytum Officinale Leaf Extract, Panthenol, Isobornylacetat, Propylene Glycol, Parfum, Pinus Mugo Leaf Oil, Rosmarinus Officinalis Oil, Arcina Montana Flower Extract, Allantoin, Salvia Lavandulaefolia Leaf Oil, Rosmarinus Officinalis Leaf Oil, Benzyl Nicotinate, Capsicum Frutescens Oleoresin , Potassium sorbate, Citric acid, Limonene, Linalool
Esensa, Khan, tiger balm	camphor	Petrolatum, Paraffinum Liquidum, Camphor , Menthol, Eucalyptus Globulus Oil, Cera Alba, Eugenia Caryophyllus Oil
Esensa, Khan, tiger cream gel	camphor	Aqua, Camphor , Menthol, Isopropyl Myristate, Eucalyptus Globulus Leaf Oil, Glycerin, Propylene Glycol, Methyl Salicylate, Polysorbate 20, Triethanolamine, Carbomer, Phenoxyethanol, Eugenia Caryophyllus Leaf Oil, Ethylhexylglycerin
Hamapharm, FlexoMax	capsaicinoids / camphor	Aqua, Alcohol Denat, Capsicum Frutescens Fruit extract , Salix Alba Bark Extract, Harpagophytum Procumbens Root Extract, Curcuma Xanthorrhiza Root Extract, Menthol, Methyl Salicylate, Sodium Hydroxide, Camphor , Glucosamine Sulfate, Acrylates/C10-30 Alkyl Acrylate Crosspolymer, Benzyl Alcohol, Ethylhexylglycerin, Tocopherol
Hansaplast, ABC, warme-creme	capsaicinoids	Active ingredient: Capsicum (750 µg/g ointment), Inactive ingrediants: methyl parahydroxybenzoate (E218), propyl parahydroxybenzoate (E216), macrogrolcetyl stearyl ether, cetyl stearyl alcohol, isopropyl myristate, viscose paraffin, propylene glycol, sodium citrate, citric acid monohydrate, purified water, sodium hydroxide
Sanofi, Finalgon - Salbe	capsaicinoids	Active ingredient: Nonylvanillamide (4000 µg/g ointment) Inactive ingrediants: nicotinic acid-B-butoxyethyl ester, Sorbic acid, citronellol, Diisopropyl adipate, colloidal silicon, white Vaseline, purified water

Table S2. Content of analytes of interest

Sample name	Analyt of interest	Content of capsaicin (µg/g)	Content of dihydrocapsaicin (µg/g)	Content of camphor (µg/g)
S1	camphor	n.c.*	n.c.	94519.00
S2	camphor	n.c.	n.c.	91304.50
S3	camphor	n.c.	n.c.	45840.00
S4	capsaicinoids	68.50	60.00	n.c.
S5	capsaicinoids / camphor	241.60	131.40	35547.00
S6	capsaicinoids / camphor	54.80	18.80	6108.20
S7	capsaicinoids / camphor	168.20	n.c.	6011.40
S8	capsaicinoids / camphor	60.60	175.00	2991.40
S9	capsaicinoids	477.80	181.00	n.c.
S10	capsaicinoids	3619.20	n.c.	n.c.
S11	capsaicinoids / camphor	299.20	222.00	35806.80

* n.c.- not contained in the sample

Table S3. Extraction recovery of the analyzed products

Sample name	Analyt of interest	Content of capsaicin (µg/ml)	Content of capsaicin + STD Capsaicin (µg/ml)	Volume (µl) of an added standard of capsaicin (1 mg/ml)	Recovery of capsaicin (%)
S4	capsaicinoids	68.50	169.25	100.00	100.45
S7	capsaicinoids / camphor	168.20	223.20	50.00	102.29
S8	capsaicinoids / camphor	60.60	110.00	50.00	99.46
S9	capsaicinoids	477.80	549.80	100.00	95.15
S10	capsaicinoids	3619.20	3842.80	100.00	103.32
S11	capsaicinoids / camphor	299.20	344.20	50.00	98.57

Sample name	Analyt of interest	Content of camphor (µg/ml)	Content of camphor + STD Camphor (µg/ml)	Volume (µl) of an added standard of camphor (10 mg/ml)	Recovery of camphor (%)
S1	camphor	94519.00	99036.00	1000.00	103.68
S2	camphor	91304.50	93384.50	1000.00	101.17
S3	camphor	45840.00	47860.00	1000.00	102.18
S7	capsaicinoids / camphor	6011.40	6142.80	500.00	94.34
S8	capsaicinoids / camphor	2991.40	3424.00	500.00	98.07
S11	capsaicinoids / camphor	35806.80	38164.60	500.00	103.30

Datafile Name:21travanj_3.lcd
Sample Name:vazelin + lanolin

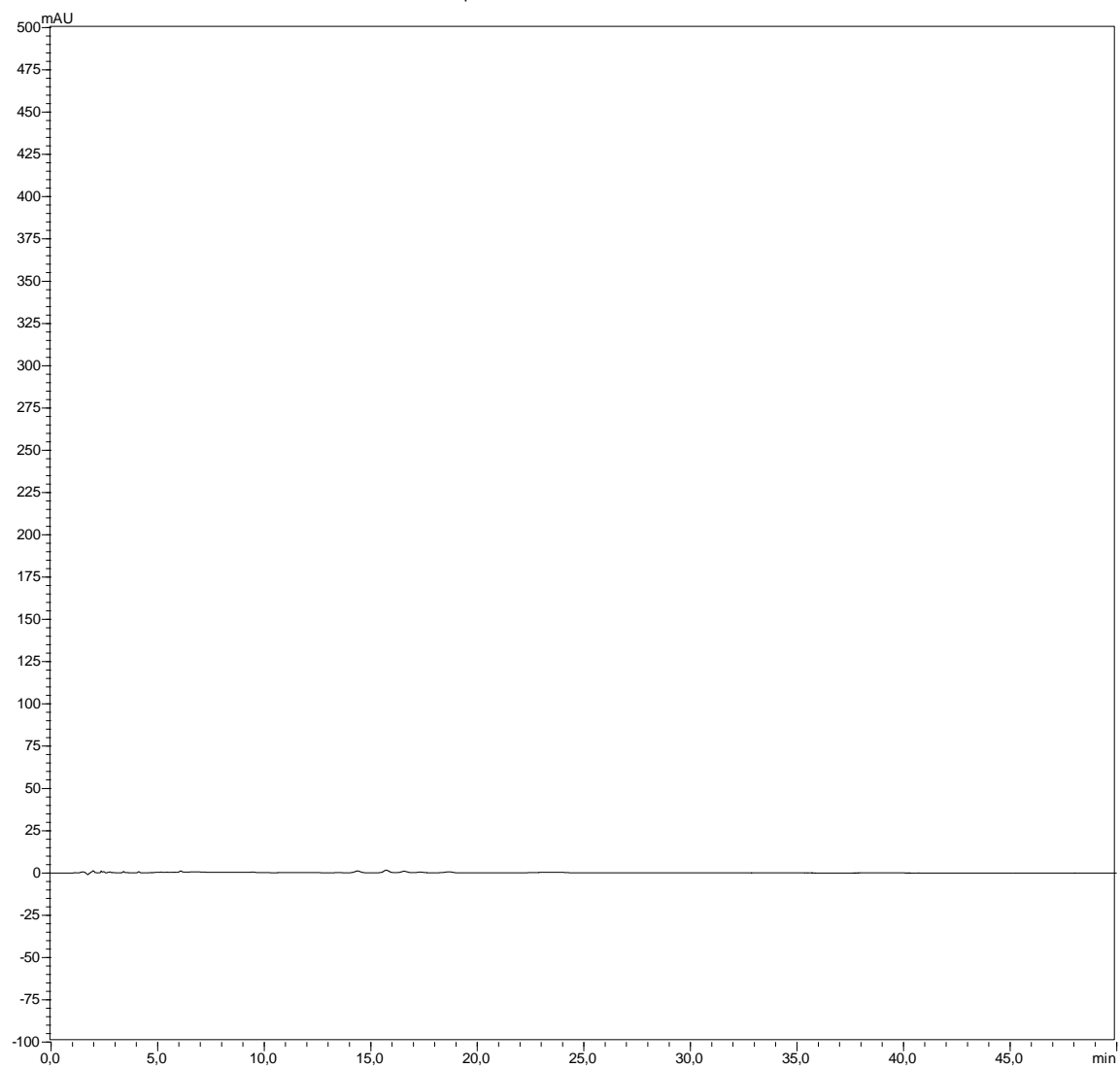


Figure S1. Chromatogram of matrix (vaselin + lanolin)

Datafile Name:21travanj_9.lcd
Sample Name:vazelin + lanolin + propolis

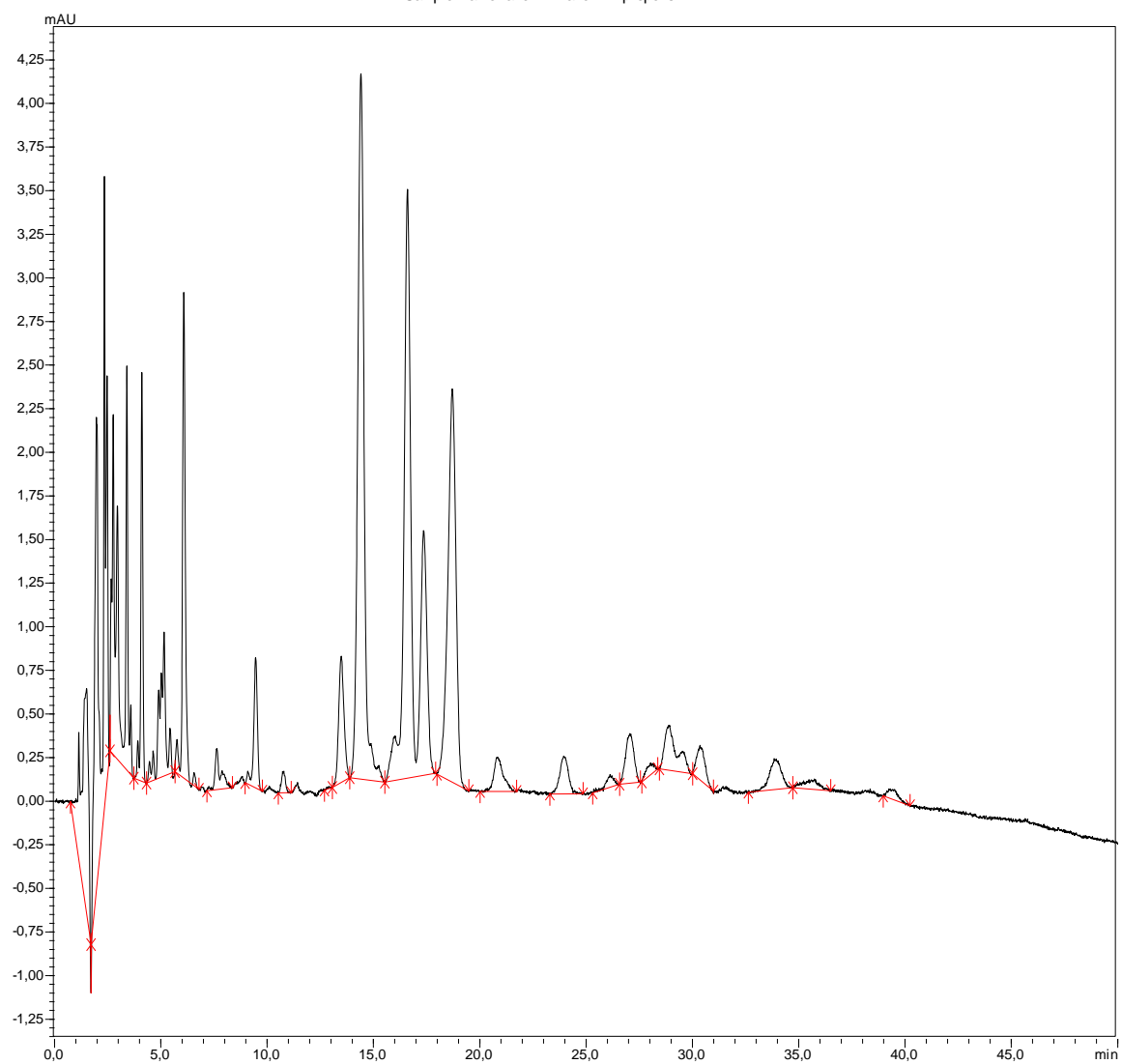


Figure S2. Chromatogram of matrix (vaselin + lanolin) + propolis

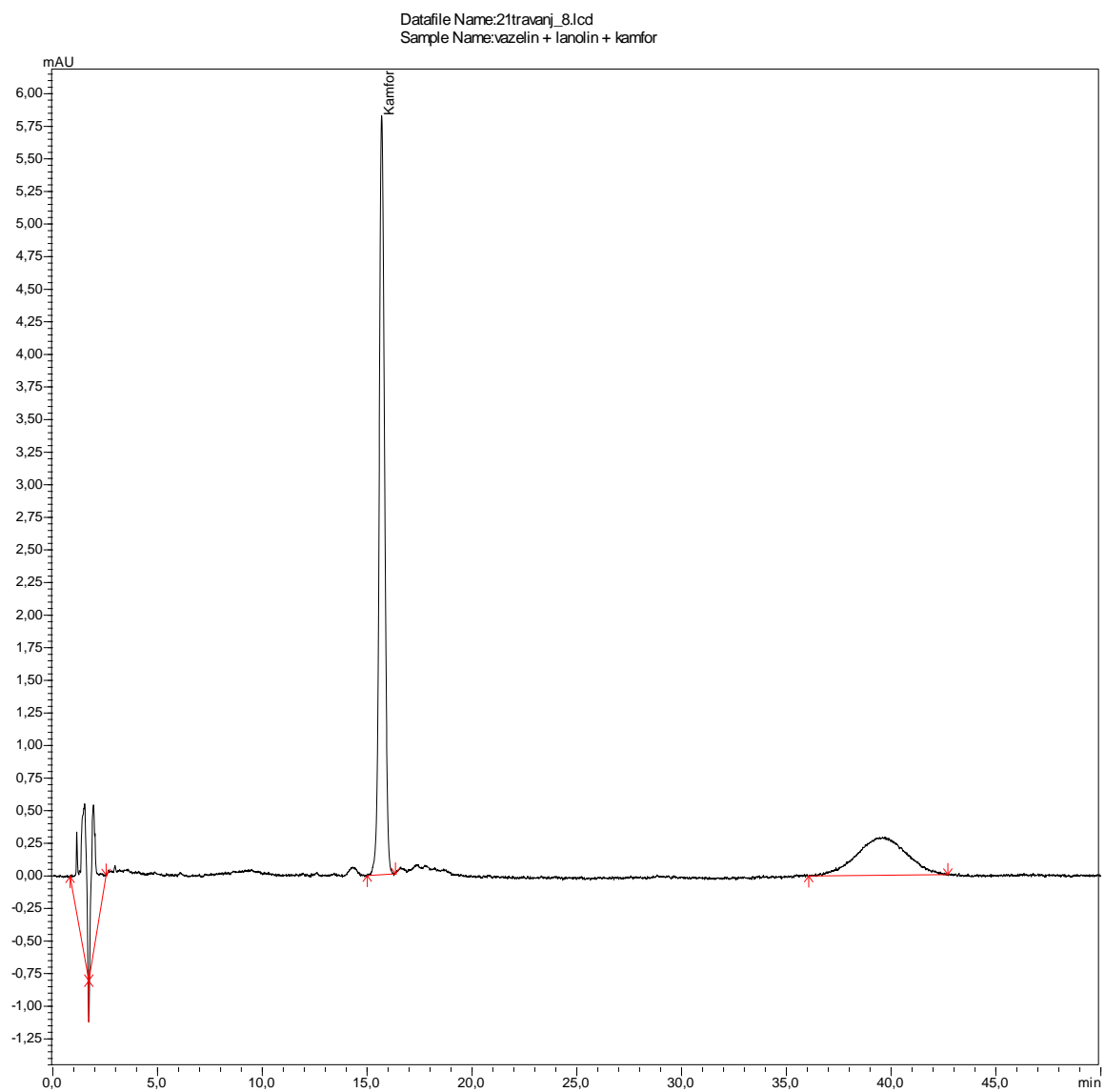


Figure S3. Chromatogram of matrix (vaselin + lanolin) + camphor

Datafile Name:21travanj_5.lcd
Sample Name:vazelin + lanolin + oleorezin 6,6% (0,944 g)

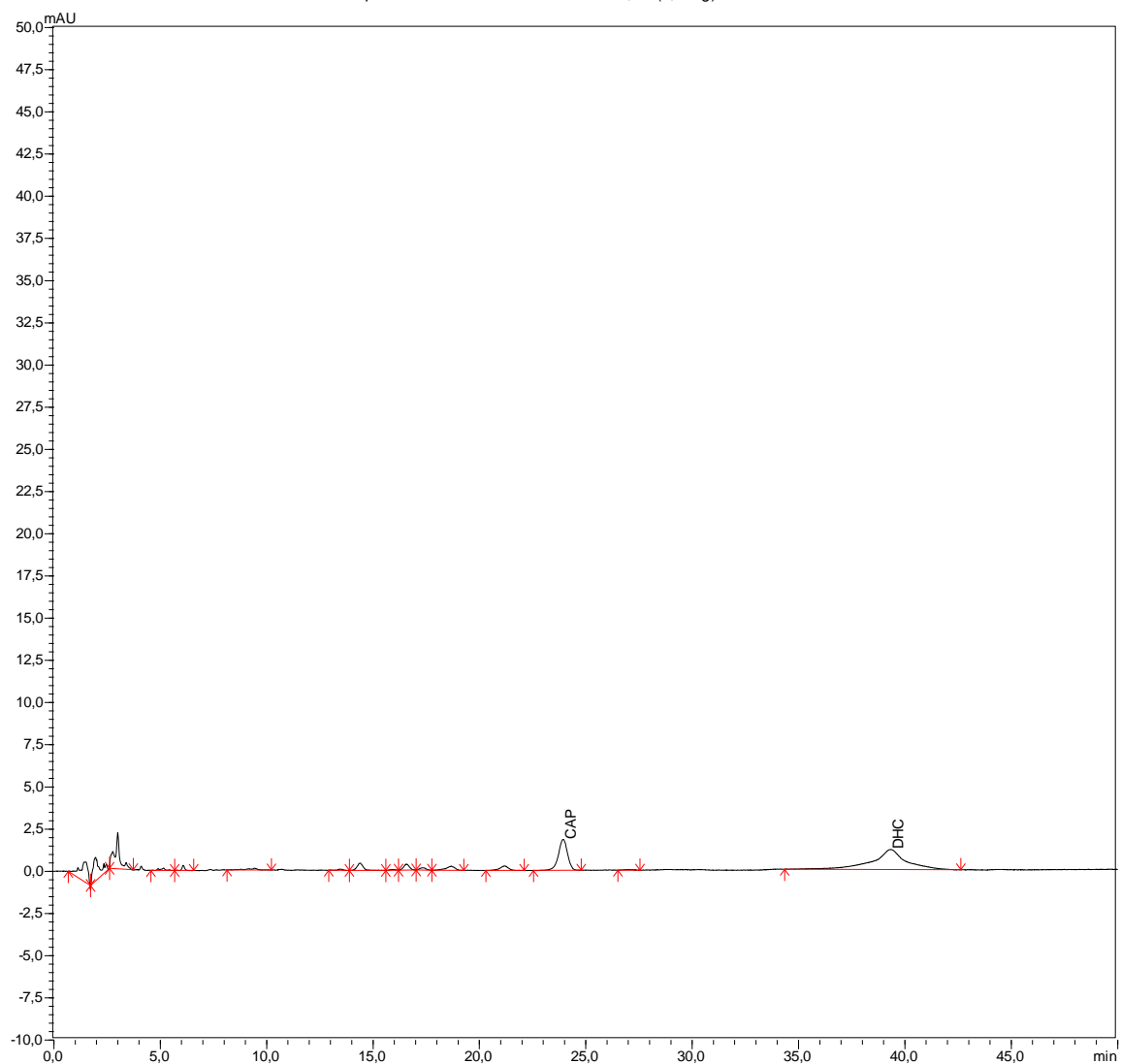


Figure S4. Chromatogram of matrix (vaselin + lanolin) + Chilli pepper Oleoresin

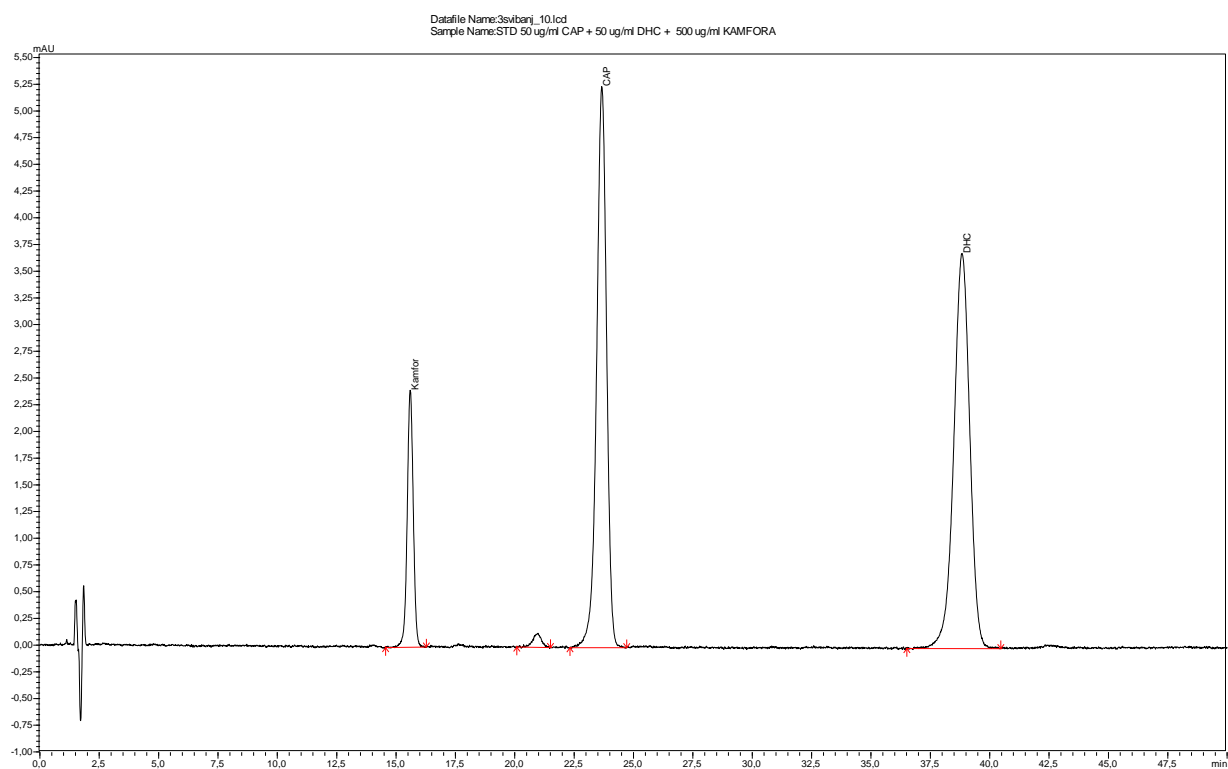


Figure S5. Chromatogram of standard solution of capsaicinoids (50 µg/mL CAP, 50 µg/mL DHC) and camphor (500 µg/mL)

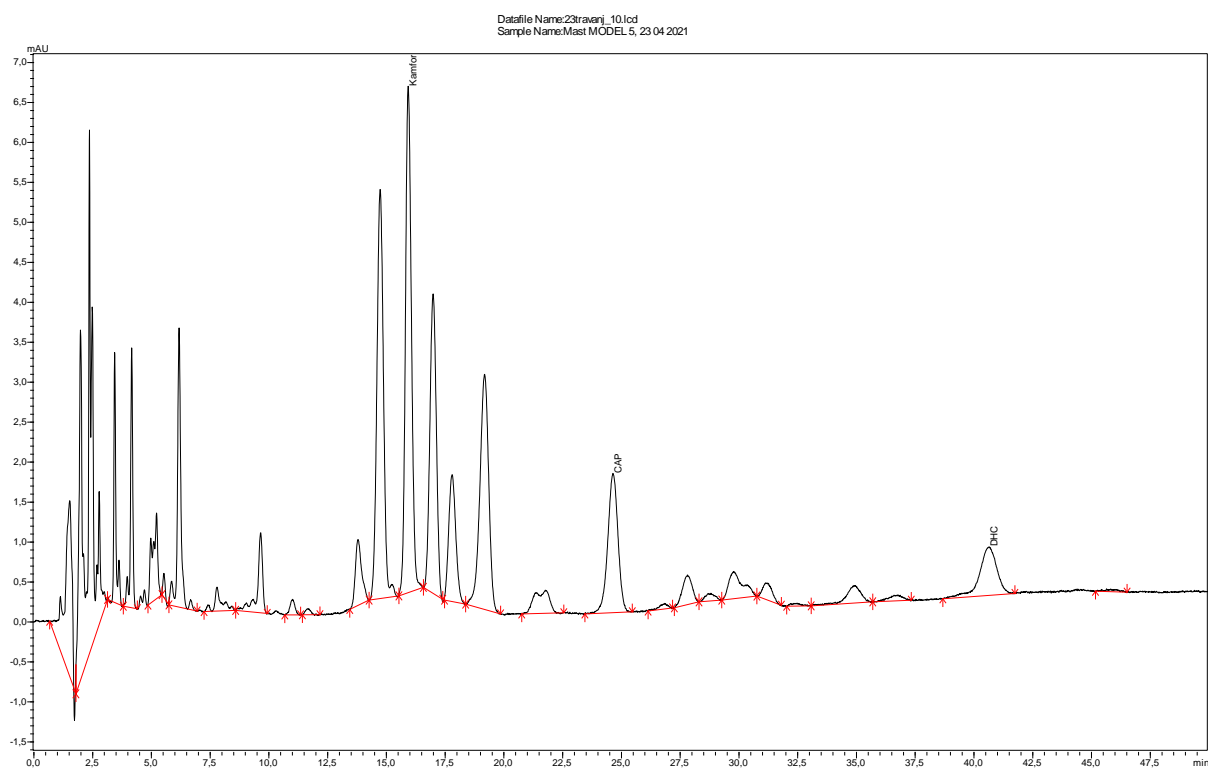


Figure S6. Chromatogram of the model of the ointment