file_path	sentence	section	entities	labels	position_start	position_end	abbrevia	viations abbreviations_longform	abbreviation_start	abbreviation_end
22 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/0_front/1_article-meta/16_abstract.xm	al Interestingly, opuntiol pretreatment inhibited UVA-induced activation of iNOS, VEGF, TNF- a, and COX-2 proteins and consequent activation of MMP-2, MMP-9, and MMP-12 in the mouse skin.	ABS	TNF-	CHEMICAL		85	89			
3458 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/3_4discussion/3_p.xml	Further, UVA radiation-mediated MAPK signaling activates NF- κ B and AP-1 to liberate inflammatory cytokines and mediators such as COX-2, TNF- α, VEGF, iNOS, and IL-6 36.	DIS	UVA, TNF-	CHEMICAL, CHEMICAL	9, 138	12, 142				
3460 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/3_4discussion/3_p.xml	In this present work, opuntiol inhibited inflammatory responses by downregulating the expression of COX-2, TNF- a, VEGF, iNOS, and IL-6 in UVA-exposed mouse skin.	DIS	TNF-	CHEMICAL		107 1	11			
3461 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/3_4discussion/3_p.xml	We previously reported that a -pinene, a naturally occurring phytochemical, suppresses UVA-induced inflammatory mediators such as COX-2, TNF- a, VEGF, INOS, and IL-6 in the mouse skin 25.	DIS	-pinene, TNF-	CHEMICAL, CHEMICAL	31, 138	38, 142				
3479 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/3_4discussion/4_p.xml	The photoaging process has specifically been triggered by several proinflammatory mediators such as prostaglandin E2 (PGE2), COX-2, iNOS, TNF- a, IL-1 β, and IL-6 receptors 39.	DIS	prostaglandin E2, TNF-	CHEMICAL, CHEMICAL	100, 138	116, 142	PGE2	prostaglandin E2	16	J 17
6649 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/3_floats-group/5_fig.xml	(a) The expression pattern of IL-6, TNF- a, COX-2, iNOS, and VEGF was analyzed by immunohistochemistry.	FIG	TNF-	CHEMICAL		36	40			
6651 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/3_floats-group/5_fig.xml	Representative photomicrographs (20x) illustrate IL-6, TNF- α , COX-2, iNOS, and VEGF expression in the mouse skin.	FIG	TNF-	CHEMICAL		55	59			
6652 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/3_floats-group/5_fig.xml	(b) Densitometry analysis of IL-6, TNF- α , COX-2, INOS, and VEGF expression in UVA and/or opuntiol-treated mouse skin.	FIG	TNF-, UVA	CHEMICAL, CHEMICAL	35, 80	39, 83				
7634 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/0_1introduction/3_p.xml	Moreover, tumor necrosis factor- α (TNF- α) and interleukins are critically involved in NF- κ B-dependent inflammatory reaction during UVA radiation-associated photoaging 17.	INT	tumor necrosis, TNF-, UVA radiation-associated	DISEASE, CHEMICAL, CHEMICAL	10, 37, 137	24, 41, 161				
1187 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/2_3results/6_3.6opuntiol_	rd Opuntiol on UVA-exposed expression of inflammatory proteins such as IL-6, TNF- q., COX-2, INOS, and VEGF was assessed by immunohistochemistry analysis.	RES	TNF-	CHEMICAL		74	78			
1188 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/2_3results/6_3.6opuntiol_	ry UVA (100J/cm 2)-irradiated mouse skin sections clearly show increased expression of IL-6, TNF- a, COX-2, INOS, and VEGF evidenced by higher brown color staining in the skin sections.	RES	UVA, TNF-	CHEMICAL, CHEMICAL	0, 92	3, 96				
1188 /Users/emanuelfarruda/venv/phytomed100/PMC7721505/sections/1_body/2_3results/6_3.6opuntiol_	nr topical treatment prevented the UVA-mediated expression of IL-6, TNF- a, COX-2, INOS, and VEGF proteins in the mouse skin (Figure 6).	RES	TNF-	CHEMICAL		65	69			
1529 /Users/emanuelfarruda/venv/phytomed100/PMC9218575/sections/2_body/2_preclinical_studies/2_table	w Compound Model Dose Mechanism of action References Curcumin 3T3-L1 preadipocytes High dose: >> 0 µM High dose curcumin generates preadipocyte apoptosis in a time- and dose-dependent manner and d	c TAB	Curcumin, curcumin, curcumin, Curcumin, curcumin, curcumin, cardiac injury, inflammation,	, cur CHEMICAL, CHEMICAL, CHEMICAL, CHEMICAL, CHEMICAL, CHEMIC	A 71, 129, 289, 559, 617, 661	1, 695, 7 79, 137, 297, 567, 625, 669, 70	9, 7 C/EBP, U	UCP, eIF2 CCAAT/enhancer-binding protein, Uncoupling Protein, eukaryotic translation initiation factor	77, 140, 207	78, 141, 208