

COLHIBIN CB

Helps to delay the signs of time

2023-06

COLHIBIN CB helps to delay the signs of time

ID Card

INCI NAME (ACTIVE)	>	Hydrolyzed Rice Protein			>			
TECHNOLOGY	>	COLHIBIN CB is a highly concentrated mixture of natural peptides with low molecular weights, extracted from edible rice protein			>			
KEY BENEFITS	>	• Helps to delay the signs of time • Highly effective Collagenase (MMP) inhibitor, which helps protect skin from unscheduled collagen degradation* • Helps to reduce skin roughness** • Effective solution for healthy-looking hair**			>			
TECHNICAL	>	Form: Liquid	pH of use: 3-9	Solubility: water soluble	>			
		Use level: 1-5%	Preservative: Phenoxyethanol-free	Biodegradability: Expected to be biodegradable				
REGISTRATION CERTIFICATION PATENT	>			Raw material verified by ECOCERT GREENLIFE, conform to the COSMOS Standard			>	



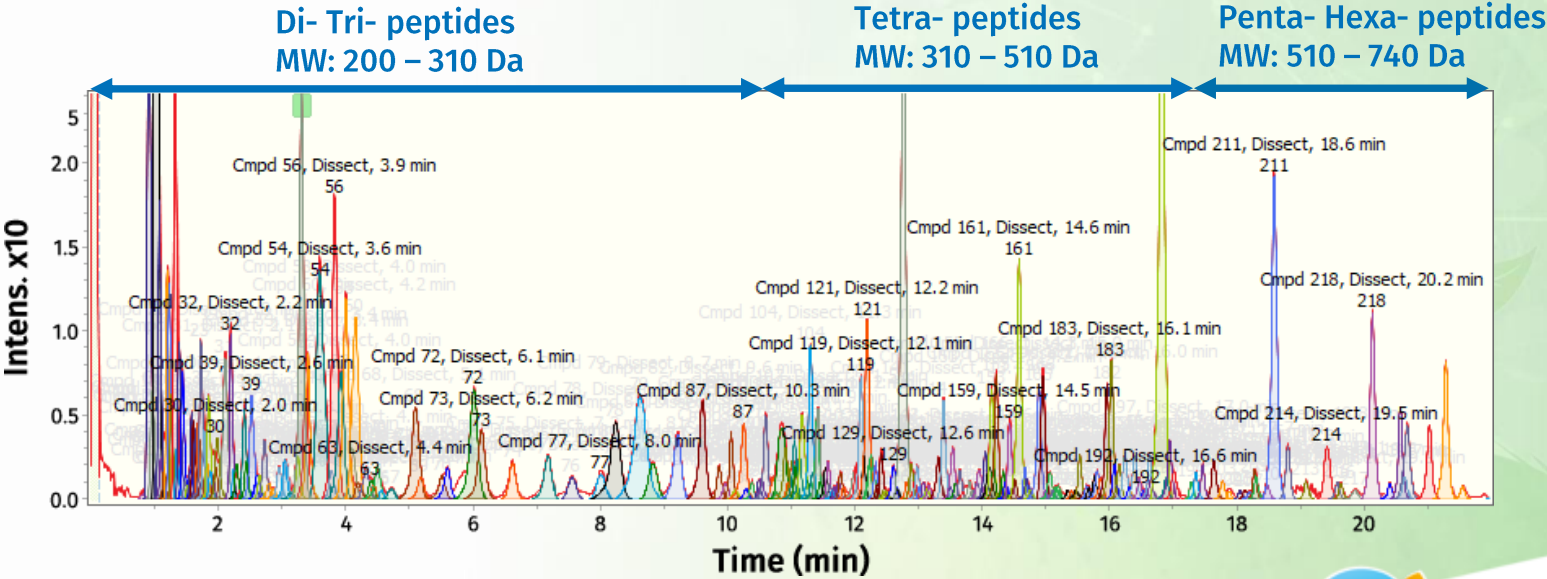
COLHIBIN CB is rich in Di-, Tri-, and Tetra- rice peptides

...with low molecular weights

- COLHIBIN CB contains more than 220 peptides of which the majority have a relative Molecular Weights (MW) of less than 800 Daltons, analyzed by LC-HR-MS.

COLHIBIN CB	Molecular weight 202–310 Da	Molecular weight 310–510 Da	Molecular weight 510–740 Da
Di- and Tri- peptides	~100		
Tetra-peptides		~110	
Penta-, Hexa-, peptides			~10

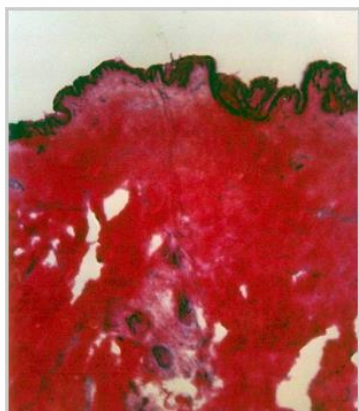
COLHIBIN CB is particularly rich in Di-, Tri- and Tetra- rice peptides.



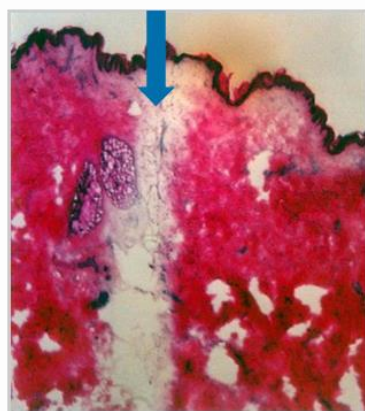
COLHIBIN CB

Highly effective Collagenase (MMP-1) inhibitor

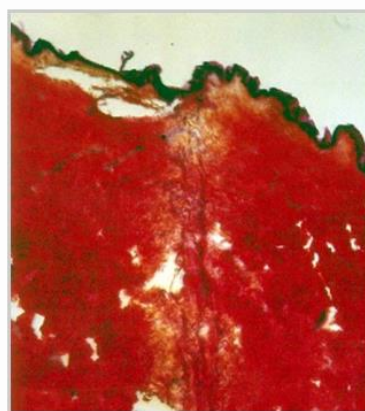
EX VIVO WITH SKIN EXPLANTS



Placebo



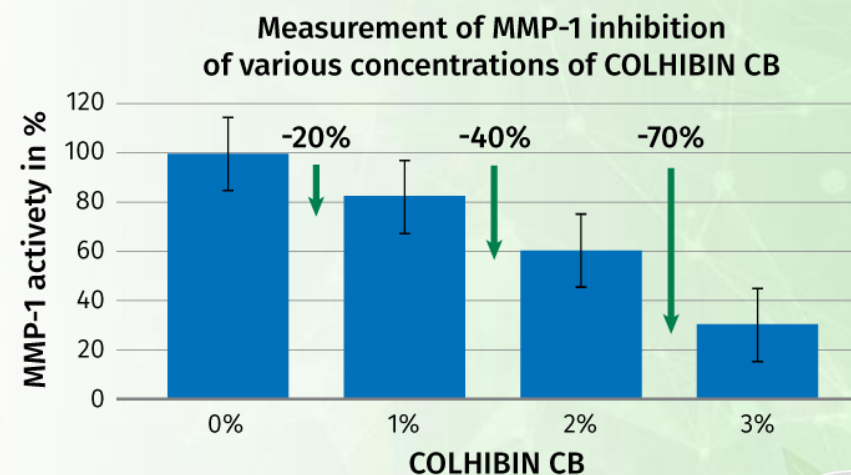
Collagenase only



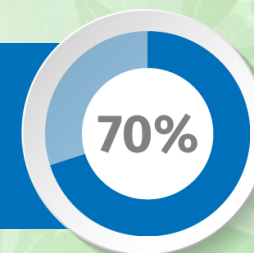
Collagenase + 5% COLHIBIN®

COLHIBIN CB is a highly effective Collagenase (MMP) inhibitor, which helps protect skin from unscheduled collagen degradation.

IN VITRO



Up to 70% reduction of MMP-1 have been obtained with COLHIBIN CB



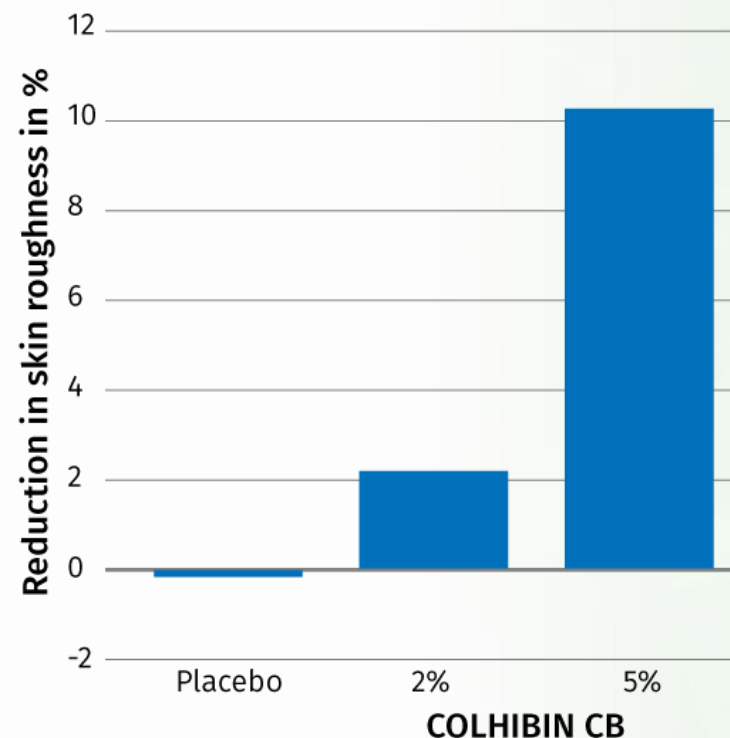
COLHIBIN CB

Visible reduction of skin roughness – in vivo

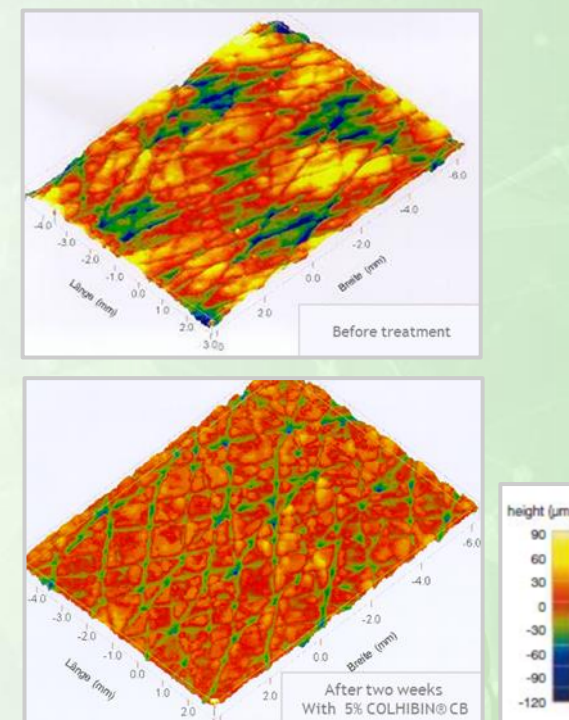
To demonstrate the beneficial effect of COLHIBIN CB (5%) on the skin surface we performed a 14 days in-vivo study with 20 volunteers.

The skin surface relief was optically measured on silicon replica taken from the skin of the volunteers before and 14 days after twice daily application of a formulation containing COLHIBIN CB (5%).

The figures shows the mean difference in skin roughness before and after 14 days treatment of a formulation with COLHIBIN CB (5%).



After 2 weeks up to 10% reduction of skin roughness after frequent use of COLHIBIN CB



After 2 weeks twice daily application of a formulation with COLHIBIN CB skin roughness is visibly reduced.

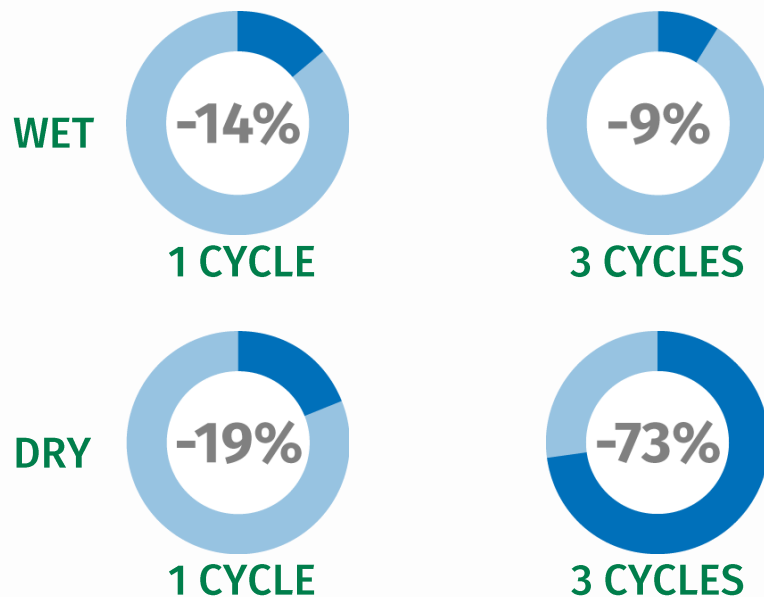
COLHIBIN CB

Helps to promote healthy-looking hair

Shampoo



Reduction in COMBING FORCE



HAIR FIBERS VS PLACEBO

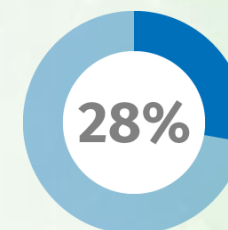
Bleached Caucasian hair
Breakage: repeated combing test
COLHIBIN CB at 3% as supplied



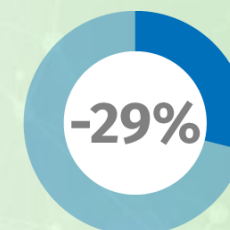
Leave-on

single application

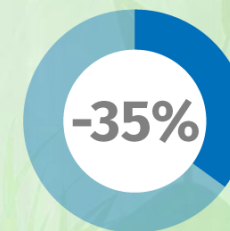
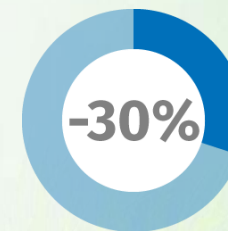
Hair BREAKAGE Reduction



SPLIT ENDS Reduction (dry combing force at tips)



Reduction in COMBING FORCE



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