

IN-VITRO HUMAN HAIR TESTING SERVICE

C&K TESTING





In-vitro Human Hair Testing Service

In daily life, factors such as perming, dyeing, using strong shampoos, exposure to high temperatures, sunlight, and physical friction can severely damage the hair's cuticle and cortex, leading to dry, brittle, and yellowed hair. To combat these issues, the cosmetics industry often develops a variety of hair and scalp care products.

How to evaluate the effectiveness of products in improving damaged hair? How to understand the actual effects of the products? CIRS C&K Testing offers industry-leading in vitro human hair testing services, providing various in vitro human hair tests and scalp care tests for companies looking to launch hair care and scalp care products in the global market. These tests help companies accurately assess the efficacy of their hair and scalp care products, providing scientific evidence for product's efficacy claims and ensuring its competitiveness in the global market.

Service Items



Hair Moisturizing

Hair Moisture Content Testing and Visualization



Nourishing

Combing Testing and Fatty Alcohol Penetration Testing



Repair

Thermal Protection: Simulation of High-Temperature Damage from Hair Dryers/ Curling Irons; UV Protection: Simulation of Ultraviolet Sunlight Exposure; Chemical Damage Repair: Simulation of Damage from Hair Dyeing/Perming



Anti-Hair Breakage (Anti-Split Ends)

Number of Broken Hair Strands and Number of Split Hair Strands



Hair Care

Improve Combing, Enhance Gloss, Prevent Curling, Reduce Frizz and Volumize Hair



Anti-pollution

Protein Content, Cysteine Content and Cuticle Condition



Oil-control

Fluffiness



Cleaning

Simulation of Sebum, PM2.5 and Dust



Hair Dye

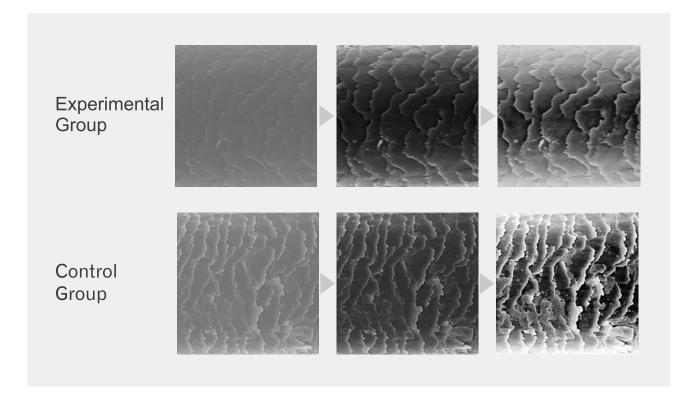
Coverage of Gray Hair



Anti-dandruff

Examples

Hair Cuticle Repair + Texture Parameter Analysis



Angle	Group	Angular Second Moment	Relevance	Inverse Difference Moment	Entropy
0 Degrees	Experimental Group	0.0949**	0.2035*	0.9067ns	3.7825*
	Control Group	0.0867	0.1951	0.8993	3.8930
90 Degrees	Experimental Group	0.0893ns	0.2031*	0.8914ns	3.8777ns
	Control Group	0.0842	0.1952	0.8915	3.9306

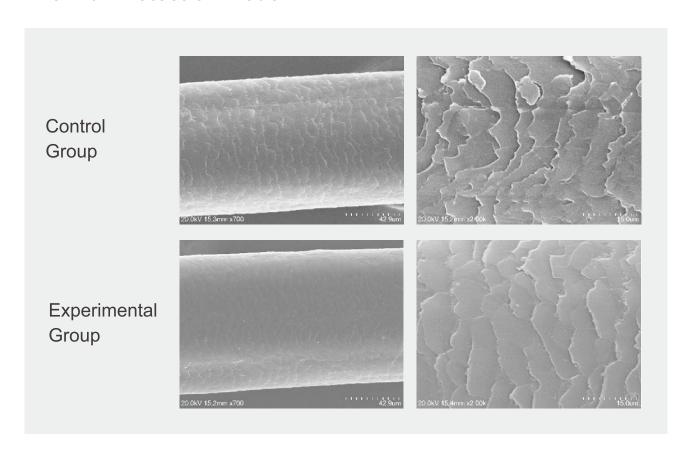
Anti-Frizz/Flyaway Volume



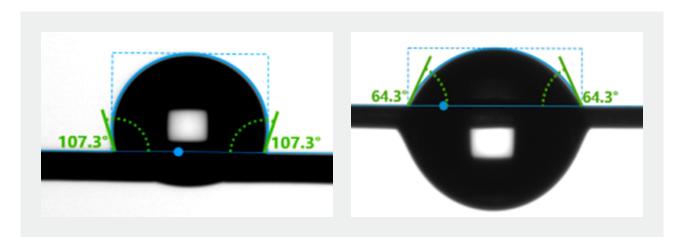


Before After

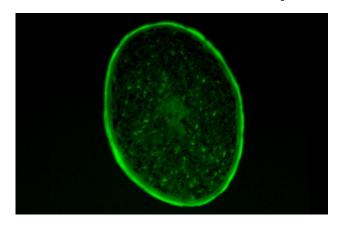
High-Temperature Damage from Hair Dryers | Thermal Protection Model



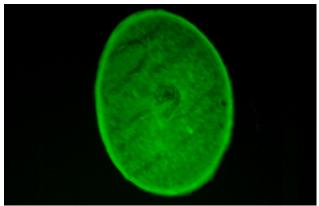
Hydrophobicity/Hydrophilicity (Contact Angle)



Protein Fluorescence Map

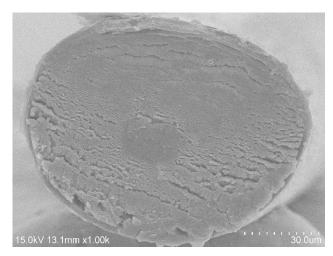


Experimental Group

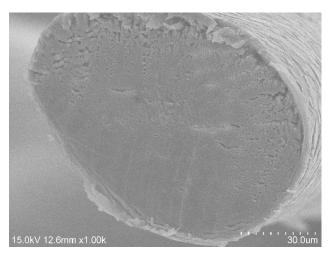


Control Group

Air Pollution Damage | 24-Hour Cigarette Smoke Exposure



Control Group



Experimental Group



C&K Testing

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