



YEDİTEPE ÜNİVERSİTESİ
KOZMETİK ARAŞTIRMA VE ÜRETİM BİRİMİ

KORUYUCU ETKİNLİK TESTİ SONUÇ RAPORU

1. Deney Laboratuvarının Tanıtılması

Yeditepe Üniversitesi Eczacılık Fakültesi Mikrobiyoloji Laboratuvarı

2. Numunenin Tanıtılması

Ürünün Adı	Duaderm Bariyer Kremi
Ürün Sıra No	A17L029
Depolama Şartları	25 °C
Teslim Alınan Tarih	18.12.2017
Çalışma Tarih Aralığı	22.12.2017-23.01.2018

3. Deney Metodu

TSE EN ISO 11930 Standardına göre; İncelenecek bir seri ürüne kendi kabına ürünün gramında veya mililitresinde 10^5 - 10^6 cfu olacak şekilde test mikroorganizması inoküle edilir. İnokülasyon süspansiyonunun hacmi, ürün hacminin 1/100'ünü aşmamalıdır. İnoküle edilen ürün homojen dağılım elde etmek için çalkalanır. Her kaptan hemen 0.Saat için 1ml/1gr örnek alınarak filtrasyon metodu ile canlı mikroorganizma sayımı yapılmak üzere ekim yapılır. Ürün, ışık görmeyen yerde diğer test zamanları için 20-25 °C'de saklanır. Her kaptan 2. Gün, 7. Gün, 14. Gün ve 28. Günlerde 1ml/1gr örnek alınarak petri metodu veya filtrasyon metodu ile mikroorganizma sayımı yapılır.

4. Deney Şartları

Ürün Deneyi Konsantrasyonları	Direkt
Numune Miktarı	1 ml
Kullanılan Besiyerleri	<ul style="list-style-type: none">Soybean Casein Digest Agar (TSA)Sabouraud Dextrose Agar (SDA)
Kullanılan Mikroorganizmalar	<ul style="list-style-type: none"><i>Pseudomonas aeruginosa</i> ATCC 9027<i>Staphylococcus aureus</i> ATCC 6538<i>Escherichia coli</i> ATCC 8739

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	• <i>Candida albicans</i> ATCC 10231
İnkübasyon Sıcaklığı	20-25°C ve 30-35°C

5. **Sonuç:** *Pseudomonas aeruginosa*, *Escherichia coli* ve *Staphylococcus aureus* için 7. Gün > log 3 azalma görülmüştür. *Candida albicans* için 7. Gün > log 1 azalma görülmüştür. 28. Güne kadar üreme saptanmamıştır. Numune test edilen mikroorganizmalara karşı **etkindir**.

		LOGARİTMİK AZALMA			
		2. Gün	7. Gün	14. Gün	28. Gün
BAKTERİ	<i>Pseudomonas aeruginosa</i>	-	> 3	NI	NI
	<i>Staphylococcus aureus</i>	-	> 3	NI	NI
	<i>E.coli</i>	-	> 3	NI	NI
MANTAR	<i>Candida albicans</i>	-	> 1	NI	NI

(-): No Test, (NI): No increase

Hazırlayan: Biyolog İnci DENİZ

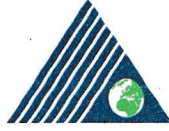
Tarih: 23.01.2018

İmza:

Onaylayan: Uzm. Biyolog Hülya DAĞÖTTÜREN

Tarih: 23.01.2018

İmza:



YEDİTEPE UNIVERSITY
FACULTY OF ENGINEERING
DEPARTMENT OF GENETICS AND BIOENGINEERING

REPORT
DETERMINATION of GENE LEVELS in KERATINOCYTS REPORT

REPORT REGISTRATION ID AND DATE	012-AG-MD-2016-3 12.05.2016
SAMPLE REGISTRATION NUMBER	2016-023
SAMPLE SENDING INSTITUTION	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/İstanbul
SAMPLE PRODUCING COMPANY AND ADDRESS	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/İstanbul
LICENSING COMPANY AND ADDRESS	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/İstanbul
NUMUNENİN GELİŞ ŞEKLİ (SEALED-UNSEALED)	Unsealed
PURPOSE OF THE EXPERIMENT	Determination of Gene Levels in Keratinocytes
EXPERIMENTAL INSTITUTION	Yeditepe University, Engineering, Genetics and Bioengineering Department
EXPERIMENT DATE OF START AND FINISH	28.03.2016-09.05.2016
PRODUCT NAME	Duaderm Intensive Care Cream & Duadermin Barrier Cream
FORMULATION FORM OF THE TESTED PRODUCT	Cream
SAMPLE SERIAL NUMBER	K15/227
SAMPLE PRODUCTION AND EXPIRATION DATE	01.04.2016
EXPERIMENTAL METHOD	Scratch Assay, RNA isolation, cDNA syntesis ve Real Time PCR
REPEAT NUMBER	2
RESULTS	It is presented in Appendix 1.
REVIEWS	Duaderm Intensive Care Cream & Duadermin Barrier Cream samples sent by Akra Cosmetics were delivered by us on 25.03.2016 for determination of gene levels in keratinocytes. Gene level determination in <i>in vitro</i> keratinocytes at Yeditepe University, Faculty of Engineering, Genetics and Bioengineering Department was determined by RealTime PCR method, and after 24 hours of application in cell culture, the gene level of Collagen type 1 (COL1A) increased by 274%. E It was determined that the product applied to epidermal keratinocytes increased the proliferation of cells. An increase in the number of cells and gene expression obtained for proliferating keratinocytes indicates that the product promotes epidermal regeneration in keratinocytes. This is an important parameter in preventing wrinkles.

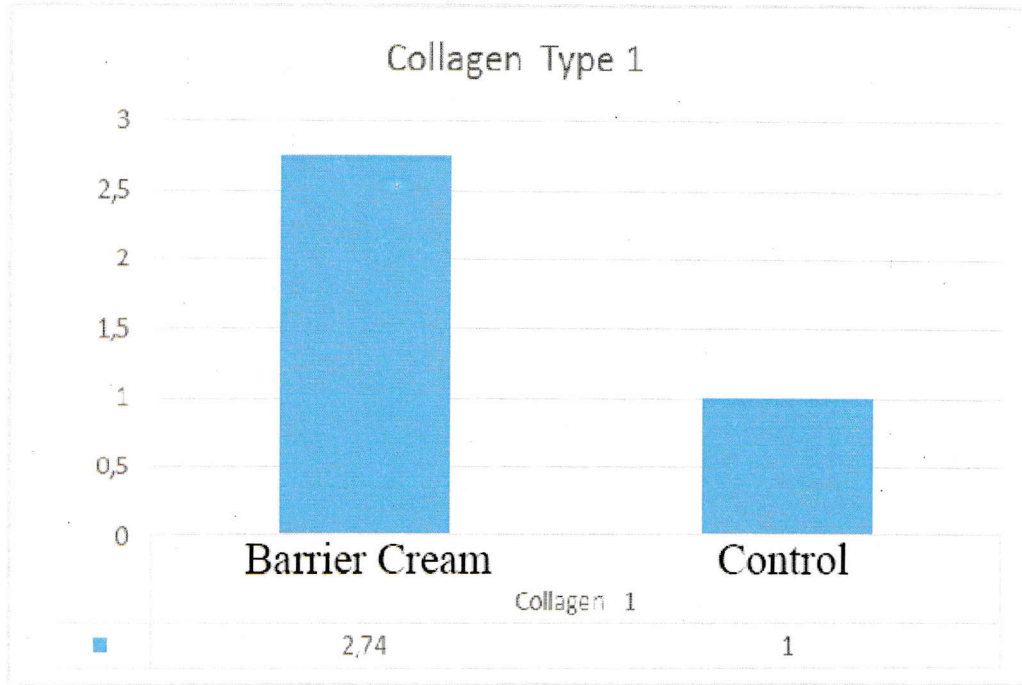
Molecular Biologist Pakize Neslihan TAŞLI
Person Performing Analysis

Prof. Dr. Fikrettin SAHİN
Head of Genetics and Bioengineering Department



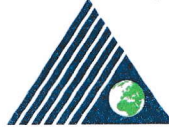
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ANNEX 1: RESULTS



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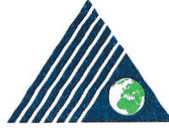
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REPORT
CELL VIABILITY TEST REPORT

REPORT REGISTRATION ID AND DATE	012-AG-MD-2016	08.04.2016
SAMPLE REGISTRATION NUMBER	2016-023	
SAMPLE SENDING INSTITUTION	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/Istanbul	
SAMPLE PRODUCING COMPANY AND ADDRESS	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/Istanbul	
LICENSING COMPANY AND ADDRESS	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/Istanbul	
NUMUNENİN GELİŞ ŞEKLİ (SEALED-UNSEALED)	Unsealed	
PURPOSE OF THE EXPERIMENT	Cell Viability Assay	
EXPERIMENTAL INSTITUTION	Yeditepe University, Engineering, Genetics and Bioengineering Department	
EXPERIMENT DATE OF START AND FINISH	28.03.2016-01.04.2016	
PRODUCT NAME	Duaderm Intensive Care Cream & Duadermin Barrier Cream	
FORMULATION FORM OF THE TESTED PRODUCT	Cream	
SAMPLE SERIAL NUMBER	K15/227	
SAMPLE PRODUCTION AND EXPIRATION DATE	01.04.2016	
EXPERIMENTAL METHOD	MTS	
REPEAT NUMBER	2	
RESULTS	It is presented in Appendix 1.	
REVIEWS	Duaderm Intensive Care Cream & Duadermin Barrier Cream samples sent by Akra Cosmetics were delivered by us on 25.03.2016 for cell viability tests. As a result of the 24-hour trials conducted in the Department of Genetics and Bioengineering, Faculty of Engineering, Yeditepe University, it was found that Duaderm Intensive Care Cream & Duadermin Barrier Cream increased the viability of human skin cells by 17% when used at a concentration of 2%. It increases the cell renewal by proliferation of epithelial cells at a high rate.	

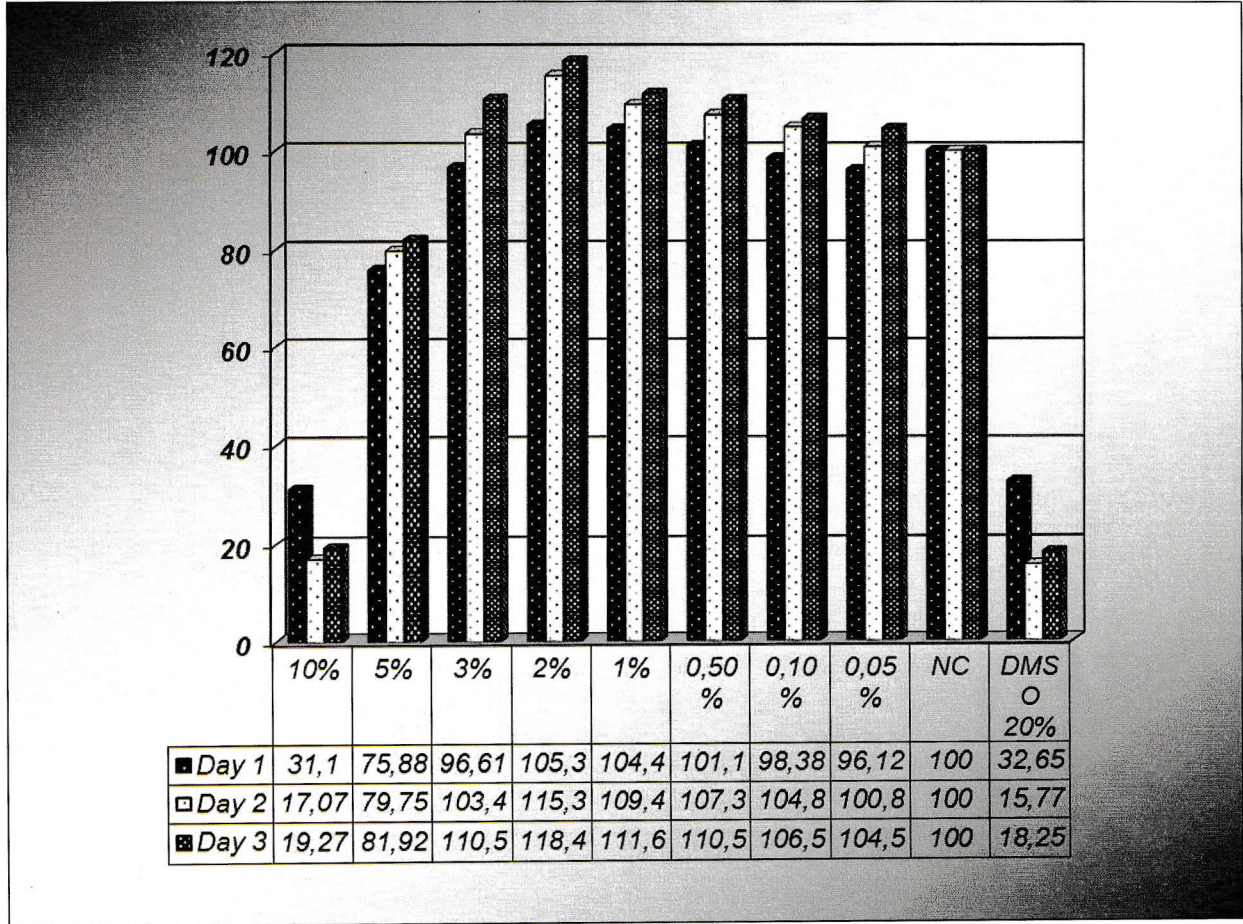
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ANNEX 1: RESULTS



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REPORT
WOUND HEALING ASSAY REPORT

REPORT REGISTRATION ID AND DATE	012-AG-MD-2016-2 08.04.2016
SAMPLE REGISTRATION NUMBER	2016-023
SAMPLE SENDING INSTITUTION	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/İstanbul
SAMPLE PRODUCING COMPANY AND ADDRESS	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/İstanbul
LICENSING COMPANY AND ADDRESS	Akra Kozmetik Viaport Houses&Suites Harmandere Mah. Dedepaşa Cad. 32/1 A Blok D 8 Pendik/İstanbul
NUMUNENİN GELİŞ ŞEKLİ (SEALED-UNSEALED)	Unsealed
PURPOSE OF THE EXPERIMENT	Wound Healing Assay
EXPERIMENTAL INSTITUTION	Yeditepe University, Engineering, Genetics and Bioengineering Department
EXPERIMENT DATE OF START AND FINISH	28.03.2016-01.04.2016
PRODUCT NAME	Duaderm Intensive Care Cream & Duadermin Barrier Cream
FORMULATION FORM OF THE TESTED PRODUCT	Cream
SAMPLE SERIAL NUMBER	K15/227
SAMPLE PRODUCTION AND EXPIRATION DATE	01.04.2016/01.04.2018
EXPERIMENTAL METHOD	Scratch Assay
REPEAT NUMBER	2
RESULTS	It is presented in Appendix 1.
REVIEWS	Duaderm Intensive Care Cream & Duadermin Barrier Cream samples sent by Akra Cosmetics were delivered by us on 25.03.2016 for wound healing tests. As a result of the 24-hour trials conducted in the Department of Genetics and Bioengineering, Yeditepe University, Faculty of Engineering, it was found that Duaderm Intensive Care Cream & Duadermin Barrier Cream healed wounds in human skin cells by 43% when 2% concentration was used. It increases the cell renewal by proliferation of epithelial cells at a high rate.

Molecular Biologist Pakize Neslihan TAŞLI
Person Performing Analysis

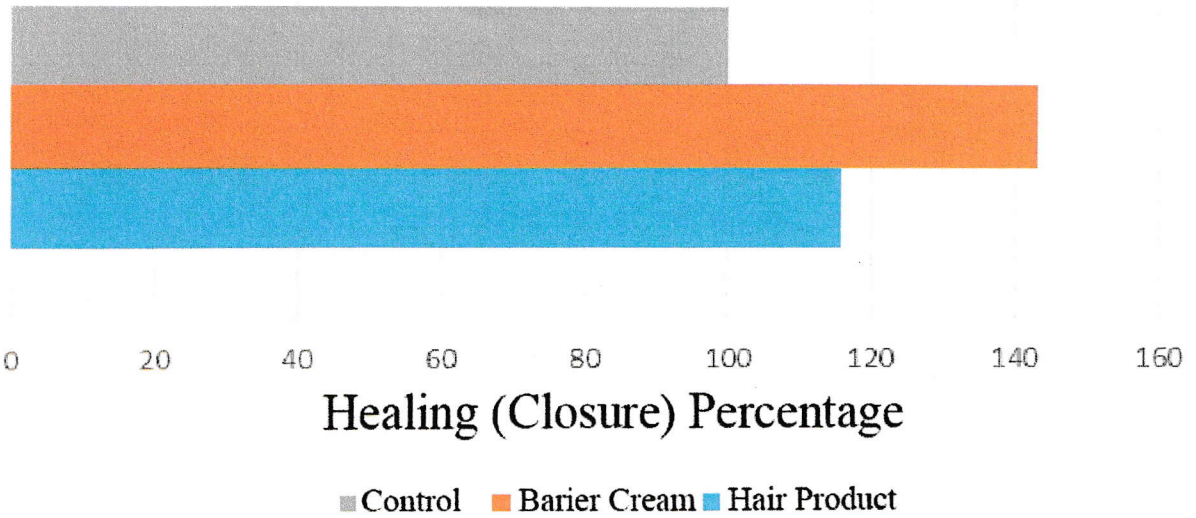
Prof. Dr. Fikrettin ŞAHİN
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ANNEX 1: RESULTS

WOUND HEALING ASSAY



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