

# **Protection Factor of UVA (PFA) test result**

**November 11, 2022**

**Ellead Co., Ltd.**



## Summary of Clinical Study

Study title	A Clinical Study for Determining the Protection Factor of UVA (PFA) of 'Abib Sedum hyaluron sunscreen Protection tube'
Study number	EL-220913408CP
Requesting institution	Kolmar Korea 61, Heolleung-ro-8-gil, Seocho-gu, Seoul, 06800, Korea
Research institution	Ellead Co., Ltd. 7&8 fl., 325, Hwangsaеul-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea
Duration of study	October 31, 2022 ~ November 11, 2022
Name of test product (Product management number)	Abib Sedum hyaluron sunscreen Protection tube (M-220913408CP)
Formulation	Lotion
Test method	<p>In accordance with Japan Cosmetic Industry Association (ISO 24442:2011) and Ellead Standard Operating Procedures (EL-P-7400).</p> <ol style="list-style-type: none"> <li>1. Test volunteers: Generally healthy male and female volunteers aged 20 - 69 without skin disease</li> <li>2. Test area: Back between scapula line and the waist</li> <li>3. Reference sunscreen: S2</li> <li>4. Method of application: The researcher marked off rectangular application area of 35 cm<sup>2</sup> (7 cm × 5 cm) and applied the test product (2.00 mg/cm<sup>2</sup>) on the test area as 15 small drops or more. Then, the researcher spread the test product gently in circular and linear movements (up and down) using a finger cot.</li> <li>5. Drying time: 15 to 30 minutes</li> <li>6. Time of assessment: 2 - 24 hours</li> </ol>
Result of pre-test	attachment
Researcher	In Hyung Jung, M.S. / Seo Yun Kim, B.S. / Da Hye Kim, B.S. / Seong Chul Yoon, B.S. / Hyo Jun Lee, B.S. / Ho Yeon Jeon, B.S.
Sample allocator	Ga Eun Yoon

## Attachment

1. Test product: Abib Sedum hyaluron sunscreen Protection tube
2. Expected PFA: 4+ (PFA 16.0)
3. Results of test:  $25.0 \pm 0.0$

Volunteer number	Age	Sex	Skin type	MPPDu (J/cm <sup>2</sup> )	Reference sunscreen PFA value	Test product MPPDp (J/cm <sup>2</sup> )	Test product PFA value
1	66	F	3	10.0	15.9	Not Measurable ↑	Not Measurable ↑
2	45	F	4	10.0	15.9	250.1	25.0
3	62	F	4	10.0	12.7	250.1	25.0
<b>Mean</b>				<b>10.0</b>	<b>14.8</b>	<b>250.1</b>	<b>25.0</b>
<b>S.D.</b>				<b>0.0</b>	<b>1.8</b>	<b>0.0</b>	<b>0.0</b>