

**Supplementary Table S1.** Antimicrobial peptides (AMPs) expressed or secreted in cells, tissues, and tissue explants after irradiation with UVC, UVB, or UVA.

Wavelength (nm)	AMP	Dose(s)	Cells/tissues	Outcome (reference)
<b>UVC spectrum (200 to 290 nm)</b>				
280-315	CAMP	12-40 mJ/cm <sup>2</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of hCAP18/LL37 mRNA expression at 24-28 hours after exposure [20]</li> </ul>
<b>UVB Spectrum (290 to 320 nm)</b>				
311 <sup>a</sup>	CAMP	1.6 J/cm <sup>2b</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human atopic skin had no changes in levels of LL37 mRNA expression after exposure [23]</li> </ul>
311 <sup>a</sup>	DEFB1	1.6 J/cm <sup>2b</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human atopic skin had increased levels of HBD1 mRNA expression after exposure [23]</li> </ul>
311 <sup>a</sup>	DEFB103A	1.6 J/cm <sup>2b</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human atopic skin had no changes in levels of HBD3 mRNA expression after exposure [23]</li> </ul>
311 <sup>a</sup>	DEFB4A	1.6 J/cm <sup>2b</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human atopic skin had decreased levels of HBD2 mRNA expression after exposure [23]</li> </ul>
312	DEFB4A	2 MED	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of HBD2 expression (IHC) at 24 hours after exposure [28]</li> </ul>
312	PI3	2 MED	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of elafin expression (IHC) at 24 hours after exposure [28]</li> </ul>
312	S100A12	2 MED	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of S100A12 expression (IHC) at 24 hours after exposure [28]</li> </ul>
312	S100A7	2 MED	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of S100A7 expression (IHC) at 24 hours after exposure [28]</li> </ul>
312	S100A8/9	2 MED	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of S100A8/9 expression (IHC) at 24 hours after exposure [28]</li> </ul>
313 <sup>c</sup>	DEFB103A	0, 150, 350 J/m <sup>2</sup>	Keratinocytes	<ul style="list-style-type: none"> <li>Human keratinocytes had increased levels of HBD3 mRNA expression and secretion at 350 J/m<sup>2</sup> in 24 and 48 hours after exposure [21]</li> </ul>

313 <sup>c</sup>	DEFB103A	3 X 1 MED <sup>d</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of HBD3 expression (IHC) in 3/3 individuals and present in skin washing fluids (ELISA) at days 1 and 6 [21]</li> </ul>
313 <sup>c</sup>	DEFB103A	250 J/m <sup>2</sup>	Skin explants	<ul style="list-style-type: none"> <li>Human skin explants had increased HBD3 expression (IHC) at 24 hours after exposure [21]</li> </ul>
313 <sup>c</sup>	DEFB4A	0, 150, 350 J/m <sup>2</sup>	Keratinocytes	<ul style="list-style-type: none"> <li>Human keratinocytes had increased levels of HBD2 mRNA expression and secretion at 350 J/m<sup>2</sup> in 24 and 48 hours after exposure [21]</li> </ul>
313 <sup>c</sup>	DEFB4A	3 X 1 MED <sup>d</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of HBD2 expression (IHC) in 1/3 individuals, but low concentrations in skin washing fluids (ELISA) at days 1 and 6 [21]</li> </ul>
313 <sup>c</sup>	DEFB4A	250 J/m <sup>2</sup>	Skin explants	<ul style="list-style-type: none"> <li>Human skin explants had minimal HBD2 expression (IHC) at 24 hours after exposure [21]</li> </ul>
313 <sup>c</sup>	RNASE7	0, 150, 350 J/m <sup>2</sup>	Keratinocytes	<ul style="list-style-type: none"> <li>Human keratinocytes had increased levels of RNase7 mRNA expression and secretion at 350 J/m<sup>2</sup> in 24 and 48 hours after exposure [21]</li> </ul>
313 <sup>c</sup>	RNASE7	3 X 1 MED <sup>d</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of RNase7 expression (IHC) in 3/3 individuals and present in skin washing fluids (ELISA) at days 1 and 6 [21]</li> </ul>
313 <sup>c</sup>	RNASE7	250 J/m <sup>2</sup>	Skin explants	<ul style="list-style-type: none"> <li>Human skin explants had increased RNase7 expression in skin explants (IHC) at 24 hours after exposure [21]</li> </ul>
313 <sup>c</sup>	S100A7	0, 150, 350 J/m <sup>2</sup>	Keratinocytes	<ul style="list-style-type: none"> <li>Human keratinocytes had increased levels of psoriasis mRNA expression and secretion at 350 J/m<sup>2</sup> in 24 and 48 hours after exposure [21]</li> </ul>
313 <sup>c</sup>	S100A7	3 X 1 MED <sup>d</sup>	Skin	<ul style="list-style-type: none"> <li>Biopsies from human skin had increased levels of psoriasis (IHC) in 3/3 individuals and present in skin washing fluids (ELISA) at days 1 and 6 [21]</li> </ul>
313 <sup>c</sup>	S100A7	250 J/m <sup>2</sup>	Skin explants	<ul style="list-style-type: none"> <li>Human skin explants had increased levels of psoriasis expression (IHC) at 24 hours after exposure [21]</li> </ul>
313 <sup>e</sup>	DEFB1	30, 100 mJ/cm <sup>2</sup>	Keratinocytes	<ul style="list-style-type: none"> <li>Neonatal foreskin, HaCaT, and A431 keratinocytes all had increased levels of HBD1 mRNA expression at 12 hours after exposure [55]</li> </ul>
313 <sup>e</sup>	DEFB4A	30, 100 mJ/cm <sup>2</sup>	Keratinocytes	<ul style="list-style-type: none"> <li>Neonatal foreskin, HaCaT, and A431 keratinocytes all had increased levels of HBD2 mRNA expression at 12 hours after exposure [55]</li> </ul>

**UVA spectrum (320 to 400 nm)**

340-400	CAMP	20 J/m <sup>2 f</sup>	Skin	<ul style="list-style-type: none"> <li>• Biopsies from human skin did not have changes in hCAP18 mRNA expression after exposure [23]</li> </ul>
340-400	DEFB1	20 J/m <sup>2 f</sup>	Skin	<ul style="list-style-type: none"> <li>• Biopsies from human sclerotic skin had decreased levels of HBD1 mRNA expression at 20 J/m<sup>2</sup> (800 J/m<sup>2</sup> total), but not in unaffected skin [22]</li> </ul>
340-400	DEFB103A	20 J/m <sup>2 f</sup>	Skin	<ul style="list-style-type: none"> <li>• Biopsies from human sclerotic skin had decreased levels of HBD3 mRNA expression at 20 J/m<sup>2</sup> (800 J/m<sup>2</sup> total), but not in unaffected skin [22]</li> </ul>

<sup>a</sup>UV range from 310 to 315 nm, emission peak at 311 nm

<sup>b</sup>Dose of 0.1 to 0.2 J/cm<sup>2</sup> per each of 6 sessions, 1.6 J/cm<sup>2</sup> total

<sup>c</sup>UV range from 290 to 320 nm, emission peak at 313 nm

<sup>d</sup>UV irradiated on 3 consecutive days with 1 MED

<sup>e</sup>UV range from 280 to 320 nm, emission peak at 313 nm

<sup>f</sup>Dose of 20 J/cm<sup>2</sup> per each of 40 sessions, 800 J/cm<sup>2</sup> total

ELISA, enzyme-linked immunosorbent assay

FACS, fluorescence-activated cell sorting

IF, immunofluorescence

IHC, Immunohistochemistry

MED, minimal erythema dose