

**Refined Immunochemical Characterization in Healthy Dog Skin of
the Epidermal Cornification Proteins, Filaggrin and
Corneodesmosin**

Supplemental Information

Table S1. Filaggrin-Derived Peptides Identified by Mass Spectrometry Analysis.

Annotated Sequence	Modifications	Positions in FLG sequence	Found in FLG 60 kDa	Found in FLG 55 kDa
[K].NPDDPTADIFMHILDLDHKD.[K]	1xOxidation [M12]	[47-67]	Not Found	High
[K].LAQAYYDLTR.[R]		[81-90]	High	High
[K].YAHHTQDEEDDREEDVEEEKEER.[I]		[104-127]	High	High
[K].GANFGHSDSGSHHYQPSTQTNR.[S]		[174-195]	High	High
[KR].QYGSGPGNQGEAHGHAR.[N]		[236-253]	High	High
[K].NWESSINQDSSEGHTEDSER.[Q]		[215-235]	High	High
[R].ENSSWENTDSFHR.[H]		[307-319]	High	High
[R].GSSTEHTSDNEGHIDSNTDFKT.[H]		[361-383]	High	High
[K].EQRPTQDEVADR.[S]		[395-406]	High	High
[K].HRESSVSQASDSEGSQSLDSETQSGSVQER.[S]		[463-491]; [1012-1040]; [1561-1589]; [2110-2138]; [2617-2645]	High	High
[R].ESSVSQASDSEGSQSLDSETQSGSVQER.[S]		[465-491]; [1014-1040]; [1563-1589]; [2112-2138]; [2619-2645]	High	High
[QR].TGHGSGNSKHRESSVSQASDSEGSQSLDSETQSGSVQE R.[S]		[454-491]; [1003-1040]; [1552-1589]; [2101-2138]; [2608-2645]	High	High
[R].GSSAHGSSEHASASYFYQVAPQEHFDSAHGQSQSSTR.[G]		[501-536]; [1050-1085]; [1599-1634]; [2148-2183]	High	High
[R].HDQAHDRSSRHGSHEGQADEFGHSESGSR.[H]		[543-571]; [1092-1120]; [2190-2218]	High	Not Found
[R].HDQAHDRSS.[H]		[543-551]; [1092-1100]; [1641-1649]; [2190-2198]; [2697-2705]	High	Not Found
[R].HSGSHEGQADEFGHSESGSR.[H]		[552-571]; [1101-1120]; [2199-2218]	High	High
[R].HSGSHEGQADEFGHSESGSRHQQSSTR.[A]		[552-578]; [1101-1127]; [2199-2225]	High	Not Found
[R].QQQSSSEFRPVSNR.[G]		[589-602]; [1138-1151]; [1687-1700]; [2236-2249]	High	Not Found
[R].TNHGQSQSGHGQSDTGTGR.[R]		[653-671]; [1202-1220]; [1751-1769]; [2300-2318]	Not Found	High
[R].GSSISQSDSEGLTEDSER.[Q]		[603-621]; [1152-1170]; [1701-1719]; [2250-2268]; [2757-2775]	High	High
[R].GSSISQSDSEGLTEDSERQYGSQSGNQQGSAR.[G]		[603-635]; [1152-1184]; [1701-1733]; [2250-2282]; [2757-2789]	High	Not Found
[R].QYGSGSGNQQGSAR.[G]		[622-635]; [1171-1184]; [1720-1733]; [2269-2282]; [2776-2789]	High	Not Found
[R].RQGSSHGHSLDTSR.[L]		[672-685]; [1221-1234]; [1770-1783]; [2319-2332]	High	High
[R].GHADSVHGR.[S]		[698-706]; [1247-1255]; [1796-1804]; [2345-2353]	High	Not Found
[R].ETQHEQSTD[R].S		[716-725]; [1265-1274]; [1814-1823]; [2363-2372]	Not Found	High
[R].HQESSLSEGHSEDSGR.[E]		[745-760]; [1294-1309]; [1843-1858]; [2392-2407]	High	High
[R].TSRHQESSLSEGHSEDSGR.[E]		[742-760]; [1291-1309]; [1840-1858]; [2389-2407]	High	High
[R].SGSEHGPLSSGPR.[T]		[729-741]; [1278-1290]; [1827-1839]; [2376-2388]	High	High
[R].NQRGSTHGQSTDRSTQLGSR.[Q]		[775-794]; [1324-1343]; [1873-1892]; [2422-2441]	High	Not Found
[R].HQESSLSEGHSEDSGREFSTTR.[G]		[745-766]	High	High
[R].HQESSLSEGHSEDSGREFSTTRGDSGSGAR.[N]		[745-774]	Not Found	High
[R].TSRHQESSLSEGHSEDSGREFSTTRGDSGSGAR.[N]		[742-774]	High	High
[R].STQLGSR.[Q]		[788-794]; [1337-1343]; [1886-1892]; [2435-2441]	High	Not Found
[R].WQPDSAHGDSDLSTVDR.[Q]		[970-986]; [1519-1535]; [2575-2591]	High	High
[R].HQESSLSEGHSEDSGREFLTTR.[G]		[1294-1315]; [1843-1864]; [2392-2413]	High	High
[R].HAGSHQQQQATR.[G]		[1381-1392]; [1423-1434]; [1465-1476]; [1930-1941]; [1972-1983]	High	High
[R].HAGSHHQQQATRGPDSahr.[D]		[1381-1400]; [1423-1442]; [1465-1484]; [1930-1949]; [1972-1991]	High	Not Found
[R].HAGSHHQQQATRGPDSahr.[E]		[1423-1449]; [1972-1998]	High	Not Found
[R].HDQAHDRSSRHGSHEGQADEFGHSESGSR.[H]		[1641-1669]; [2697-2725]	High	Not Found
[R].HSGSHEGQADEFGHSESGSR.[H]		[1650-1669]; [2706-2725]	High	High
[R].HSGSHEGQADEFGHSESGSRHQQSSTR.[A]		[1650-1676]; [2706-2732]	High	High
[R].GPHPSAHDGDSLSTVDR.[Q]		[2068-2084]	High	High
[R].GSSAHGSSEHASASYFYQVASQEHFDSAHGQSQSSTR.[G]		[2655-2690]	High	High
[R].QQQSSDFRPVSNR.[G]		[2743-2756]	High	High
[R].TNHGQSQSGHGQSDPGIGR.[R]		[2807-2825]	High	High

Detailed information (q values, scores, posterior error probabilities, ranks and confidences Mascot, theoretical MH+ [Da], DeltaM [ppm] for each sample, etc.) is available on request. In green, identified peptides with FDR < 1%.

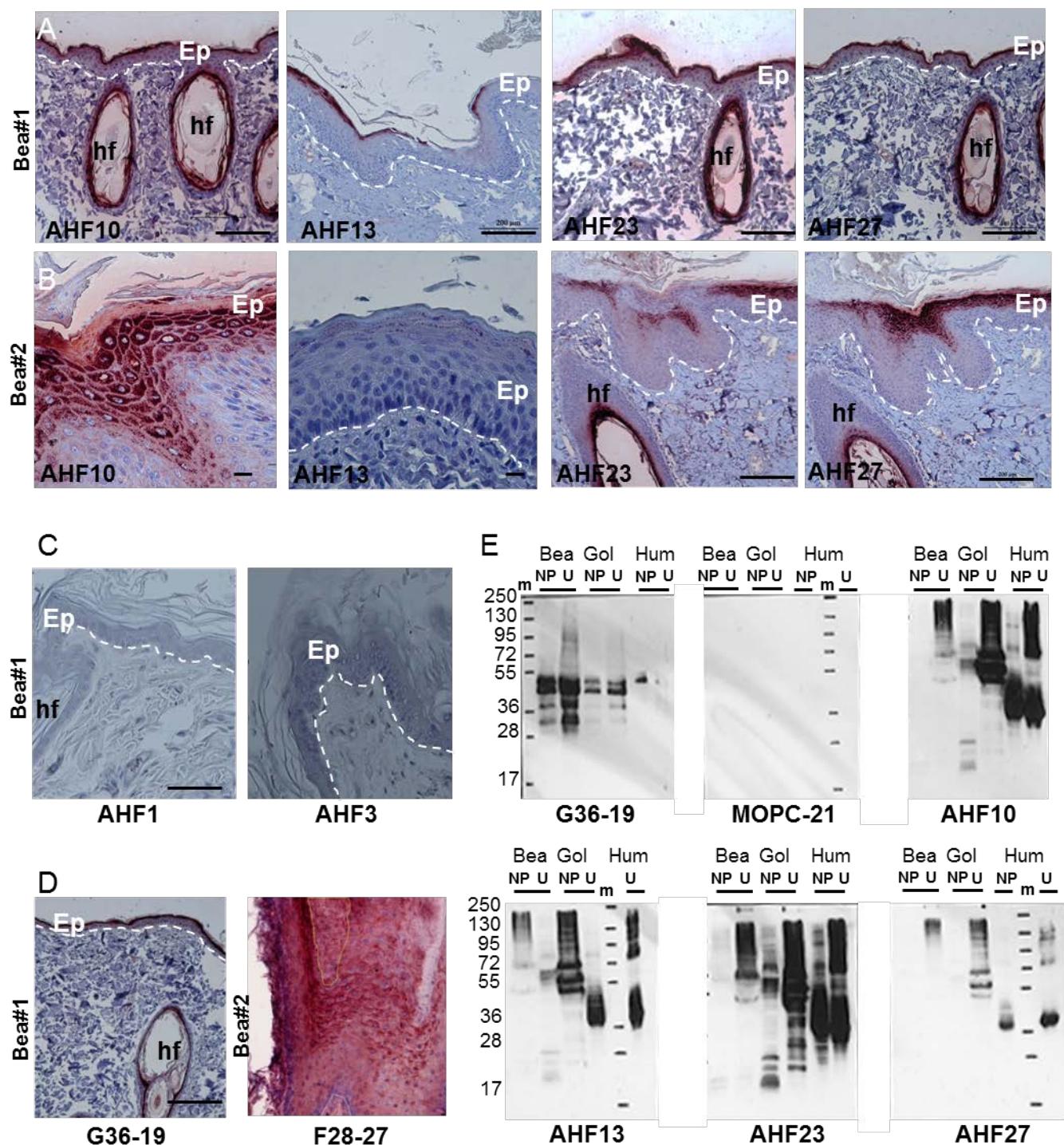


Figure S1. (A-D) Sections of fixed skin from two beagle dogs (Bea#1, back skin; Bea#2, paw pad) were analyzed by immunohistochemistry with the AHF mAbs, as indicated, G36-19 and F28-27. Due to high non-specific background, F28-27 was not used further. Ep, epidermis; hf, hair follicle. When visible, the dermo-epidermal junction is shown by a white line. Scale bar = 200 µm. (E) Beagle dog (Bea), golden (Gol) retriever dog and human epidermis was sequentially extracted in Tris-EDTA buffer containing either Nonidet-P40 (TE-NP40 extracts, NP) or 8 M urea (TE-U extracts, U). The extracted proteins were separated by SDS-PAGE and immunodetected with AHF, G36-19 and MOPC-21 mAbs, as indicated. The migration of molecular mass markers (m) is indicated on the left in kDa.