

Table 8.1. Cellular content of individual epidermal columns in stacked epidermis, values per surface corneocyte in non-stacked epidermis, and the relationship between epidermal cell production rates and ordered epidermal structure

	Mouse dorsum	Hairless mouse dorsum	Mouse ear	Mouse foot	Mouse tail	Guinea pig ear	Human
Basal cells/EPU <sup>a</sup>	10.6 <sup>1</sup>	11 <sup>1</sup>	10-11 <sup>5</sup> , 9.3 <sup>2</sup>	14.1 <sup>2</sup>	25 <sup>1</sup>	—	20-28 <sup>1</sup>
Keratocytes/EPU <sup>a,b</sup>	3.0 <sup>4</sup>	3.5 <sup>4</sup>	3 <sup>5</sup> , 15.3 <sup>2</sup>	35.7 <sup>2</sup> , 12 <sup>4</sup>	5-6 <sup>4</sup>	—	~5 <sup>1</sup>
Corneocytes/EPU <sup>a,b</sup>	6 <sup>4</sup>	7 <sup>4</sup>	6-8 <sup>5</sup> , 10 <sup>2</sup>	37 <sup>2</sup> , 40 <sup>4</sup>	32 <sup>4</sup>	—	10-28 <sup>1</sup>
Total epidermal cells/EPU <sup>a</sup>	~20 <sup>1,4</sup>	~21 <sup>1,4</sup>	~20 <sup>5</sup> , 25.3 <sup>2</sup>	72.7 <sup>2</sup> , 52 <sup>4</sup>	~80 <sup>1,4</sup>	—	35-60 <sup>1</sup>
Proliferative cells/EPU <sup>d</sup>	10.6 <sup>1</sup>	11 <sup>1</sup>	9.7 <sup>1</sup>	20 <sup>4</sup>	25 <sup>1</sup>	—	20-28 <sup>1</sup>
Cell production rate/EPU/day <sup>a</sup>	1.3 <sup>1</sup>	2.4 <sup>1</sup>	1.0 <sup>1</sup> , 0.6 <sup>3</sup>	1.7 <sup>3</sup> , 6.7 <sup>1</sup>	4.1 <sup>1</sup>	1.0 <sup>3</sup>	2.6 <sup>1</sup>
Observed transit time (days)	9 <sup>1</sup>	4-5 <sup>1</sup>	11-24 <sup>1</sup> , 20-24 <sup>3</sup>	6-7 <sup>3</sup> , 7 <sup>1</sup>	9 <sup>1</sup>	12-14 <sup>3</sup>	13.5 <sup>1</sup>
Labelled cells/EPU <sup>d</sup>	~0.4 <sup>1</sup>	~0.4 <sup>1</sup>	1 <sup>4</sup> , 0.48 <sup>2</sup>	3.81 <sup>2</sup>	—	—	—
Organization	Stacked	Stacked in places	Stacked	Non-stacked	Stacked with maximal overlap	Stacked in places	Stacked in places

1. Potten (1975b) from a review of the literature.

2. Christophers (1972a).

3. Christophers *et al.* (1974).

4. Allen and Potten (1976b).

5. Allen and Potten (1974a).

(a) or per surface corneocyte in non-stacked epidermis;

(b) where no actual counts/EPU or surface corneocyte are available, inferred from measurements of the number of layers in the respective compartment.