	embryonic stage	nb of embryos which were sectioned	nb of sections	average nb of total (ep+de) mb/section ($n_{t/s}$)	average nb of mb defined by whole mount (n_{wm})	average nb of ep mb/section ($n_{e/s}$)	ratio of ep mb/total mb (%) ($n_{e/s}/n_{t/s}$)	estimated nb of ep mb ($n_e = n_{wm} \times n_{e/s} / n_{t/s}$)	average nb of de mb/section ($n_{d/s}$)	ratio of de mb/total mb (%) ($y = n_{d/s}/n_{t/s}$)	estimated nb of de mb ($n_d = n_{wm} \times n_{d/s} / n_{t/s}$)
WT	E10.5	-	-	-	98	-	0.00	0	-	100.00	98
	E11.5	4	138	7.54	393	0.50	6.63	26	7.04	93.37	367
	E12.5	4	118	23.40	1,062	10.00	42.74	454	13.40	57.26	608
	E13.5	4	116	44.86	2,874	34.17	76.17	2,189	10.69	23.83	685
	E14.5	4	137	129.63	7,259	121.83	93.98	6,822	7.80	6.02	437
	E15.5	2	66	329.70	18,543	320.32	97.15	18,014	9.38	2.85	529
Δbcat	E10.5	-	-	-	106	-	-	0	-	100.00	106
	E11.5	2	54	9.82	533	0.20	0.02	11	9.62	97.96	522
	E12.5	2	55	11.34	715	1.65	14.55	104	9.69	85.55	611
	E13.5	2	54	11.35	791	3.10	27.31	216	8.25	72.69	575
	E14.5	2	65	8.62	1,000	5.45	63.23	632	3.17	36.77	368
	E15.5	2	69	10.44	1,510	8.22	78.74	1,188	2.21	21.26	321
bcat*	E10.5	-	-	-	95	-	0.00	0	-	100.00	95
	E11.5	4	118	2.43	278	0.05	2.06	6	2.38	97.94	272
	E12.5	2	56	5.95	773	0.79	13.28	103	5.16	86.72	670
	E13.5	2	56	10.03	1,452	7.57	75.47	1,096	2.46	24.53	356
	E14.5	2	41	20.24	2,578	19.24	95.06	2,451	1.00	4.94	127
	E15.5	2	53	79.58	6,302	73.98	92.96	5,858	5.60	7.04	443

mb=melanoblast; nb=number; e=epidermis; d=dermis

Table S1: Determination of the number of melanoblasts

The number (nb) of melanoblasts (mb) was determined from whole mount (wm) and sectioned (s) embryos previously stained with Xgal. Between 41 and 138 sections from 2-4 embryos were analyzed at each stage of development. n_{wm} is the mean number of melanoblasts assessed from whole mounts (wm). $n_{e/s}$, $n_{d/s}$ and $n_{t/s}$ are the mean numbers of epidermal (e), dermal (d) and total $(t = e + d)$ melanoblasts per section (s), respectively. n_e and n_d are the numbers of melanoblasts in epidermis and dermis, respectively, on a given embryonic day. They were calculated as follows: $n_e = n_{WM} \, x \, n_{e/s} / n_{t/s}$ and $n_d = n_{WM} \, x \, n_{d/s} / n_{t/s}$.

For data from whole mounts, note that the mean values are almost identical to the median values: mean and median on embryonic day 10.5 (E10.5) are 98 and 100, respectively, on E11.5 (393 and 364), on E12.5 (1,062 and 900), on E13.5 (2,874 and 2,908), on E14.5 (7,259 and 7,080) and on E15.5 (18,543 and 19,907).

For data from sections, note that the mean and median are for Δbcat on E10.5 (106 and 104), on E11.5 (533 and 556), on E12.5 (715 and 718), on E13.5 (791 and 705), on E14.5 (1,000 and 1,100) and on E15 (1,510 and 1,400), and for bcat* on E10.5 (95 and 95), on E11.5 (278 and 254), on E12.5 (773 and 773), on E13.5 (1,452 and 1,530), on E14.5 (2,578 and 2,551) and on E15.5 (6,302 and 6,497).