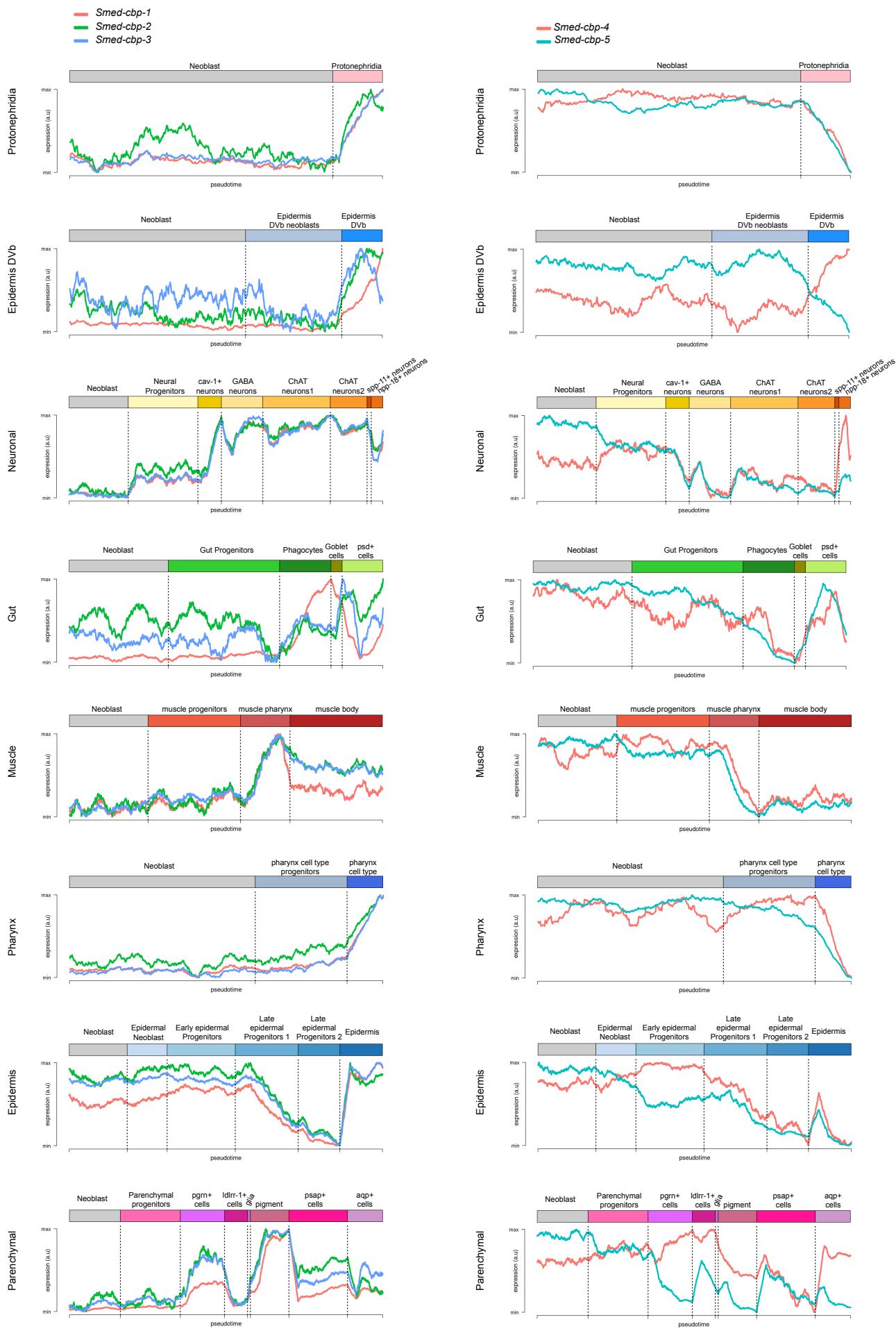


—  
0.9



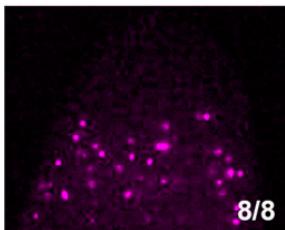
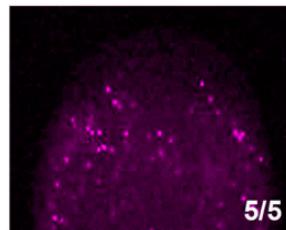
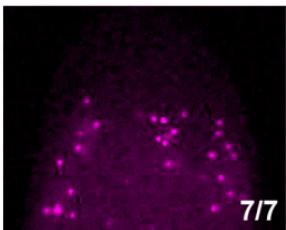
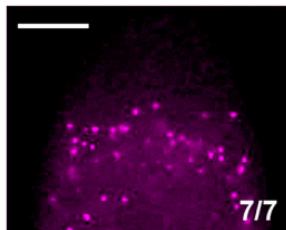
*gfp(RNAi)*

*Smed-cbp-1(RNAi)*

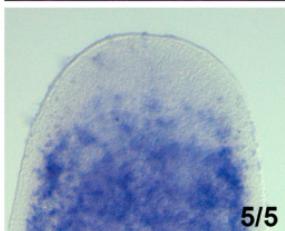
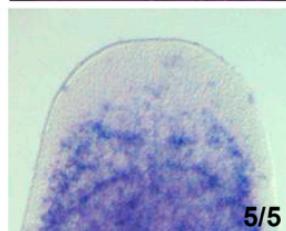
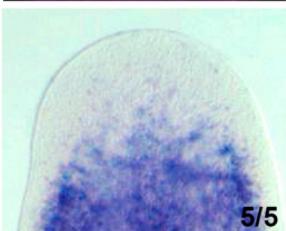
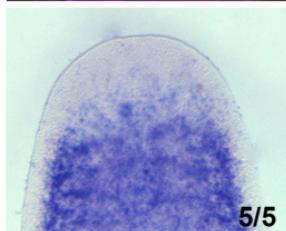
*Smed-cbp-4(RNAi)*

*Smed-cbp-5(RNAi)*

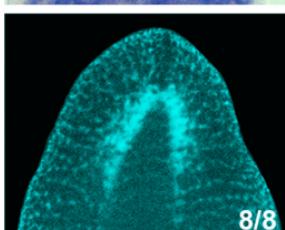
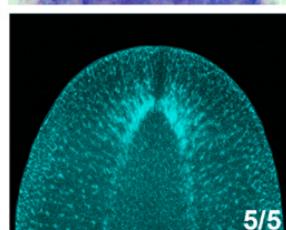
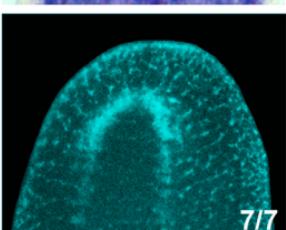
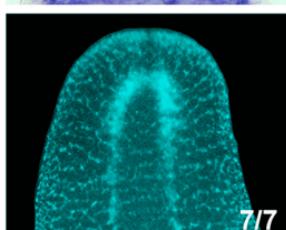
PH3



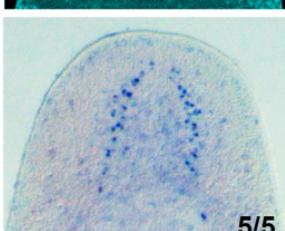
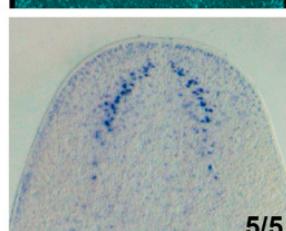
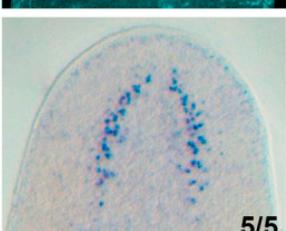
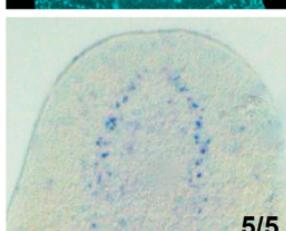
*Smedwi-1*

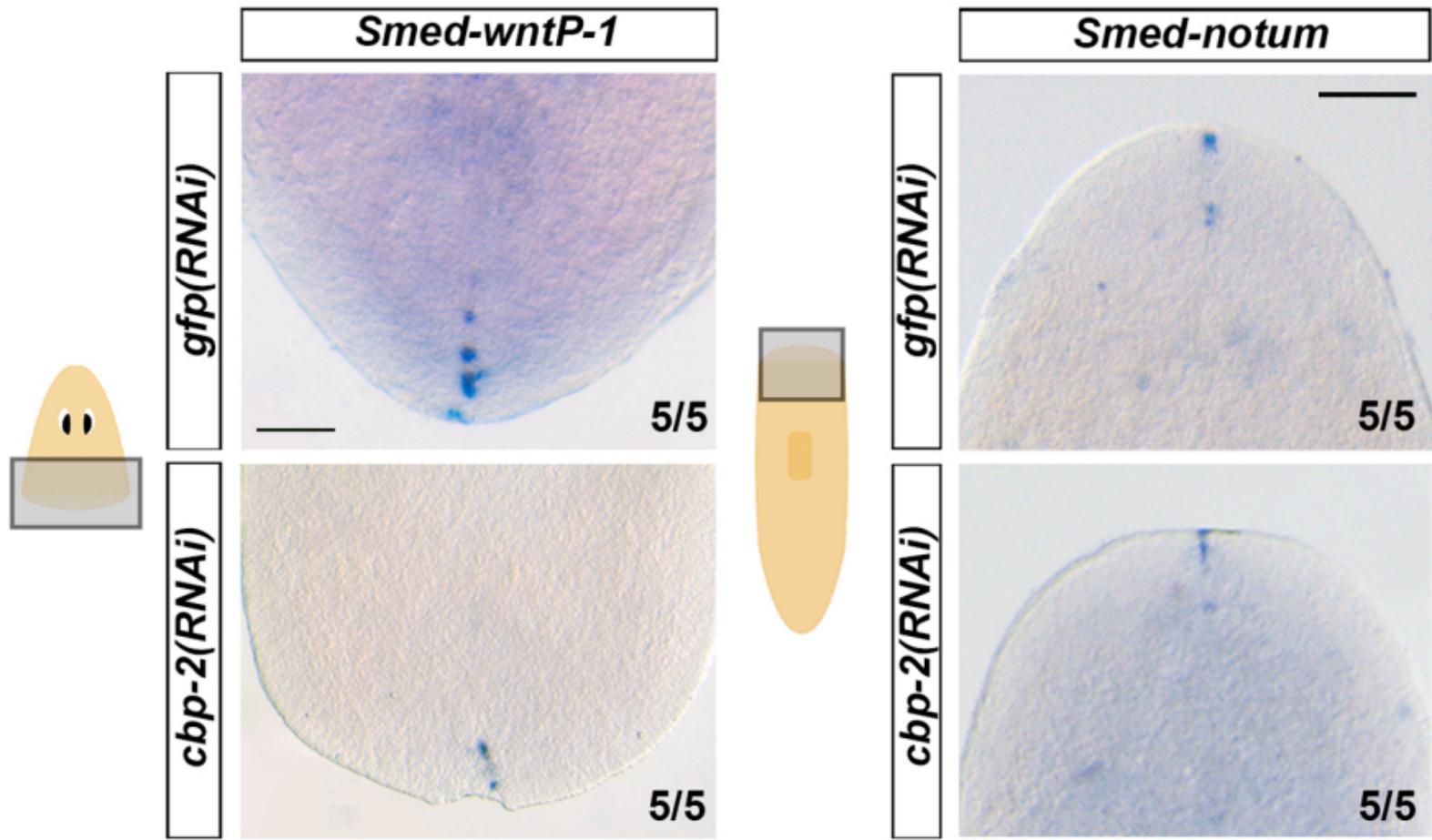


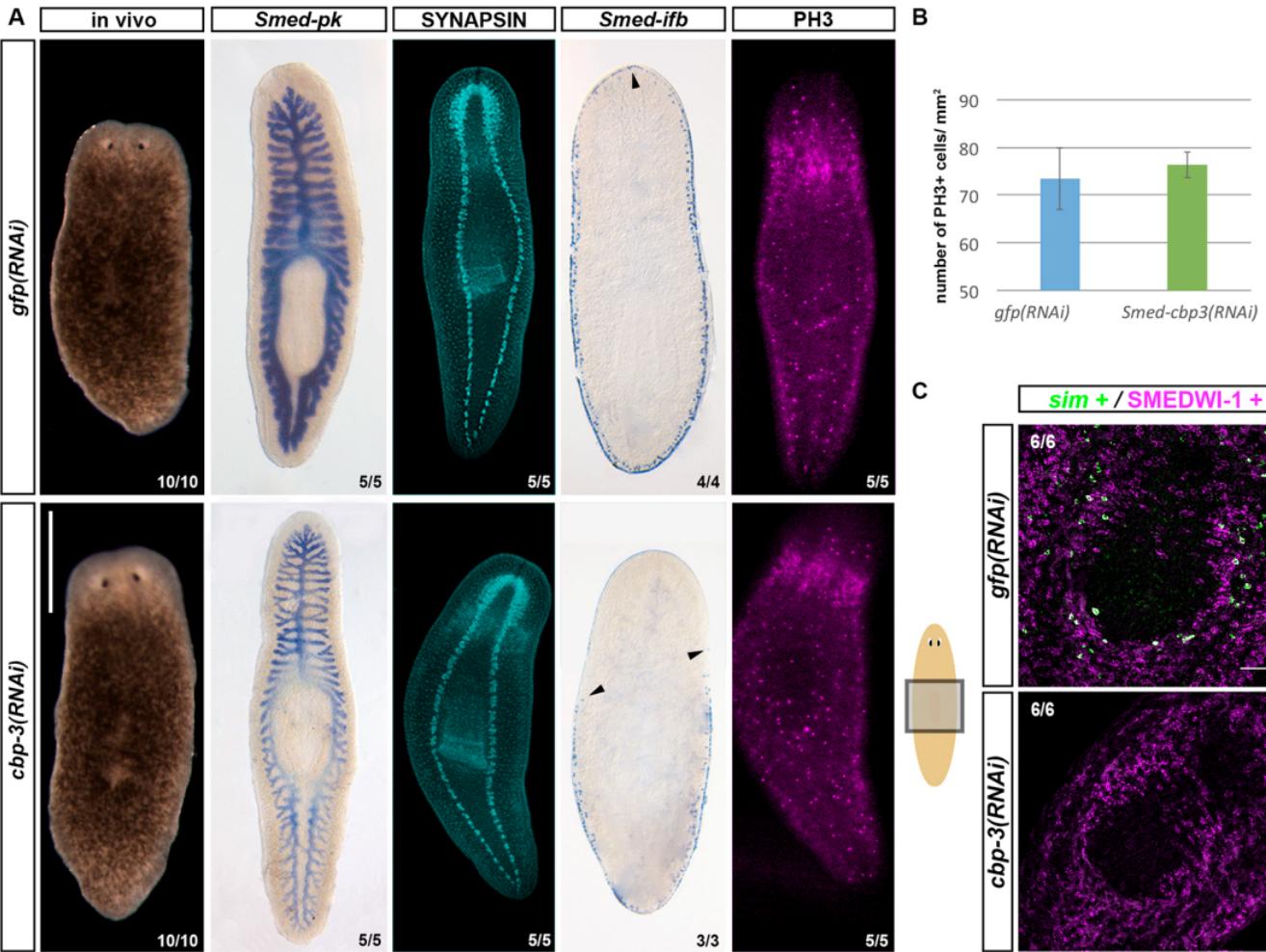
SYNAPSIN

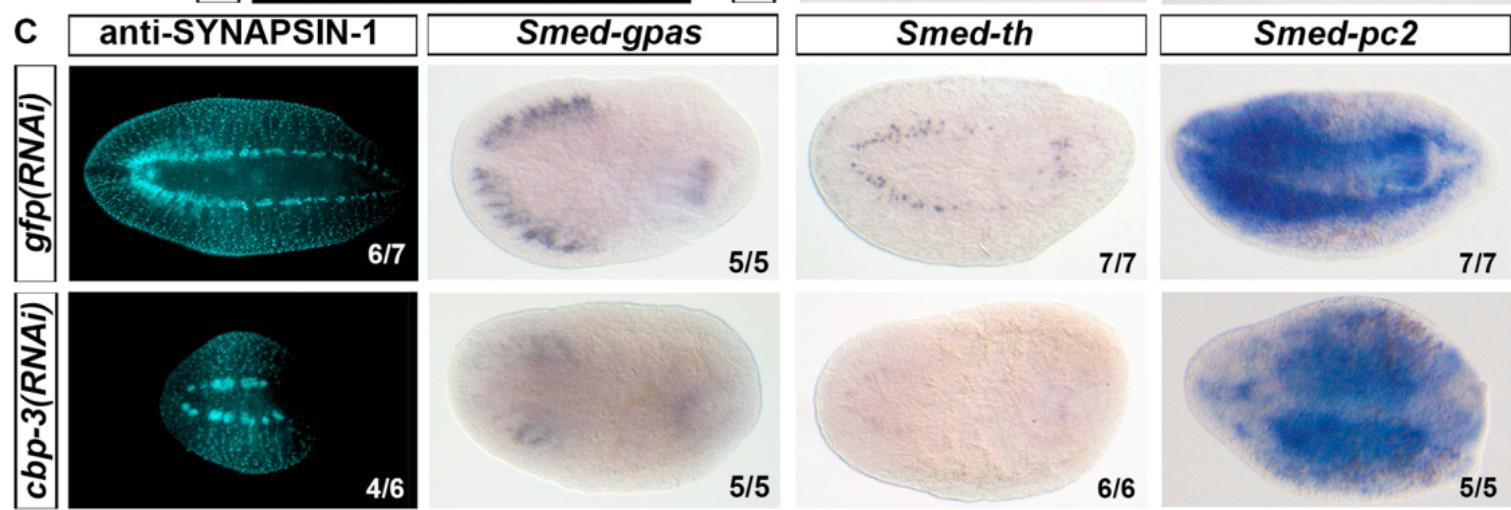
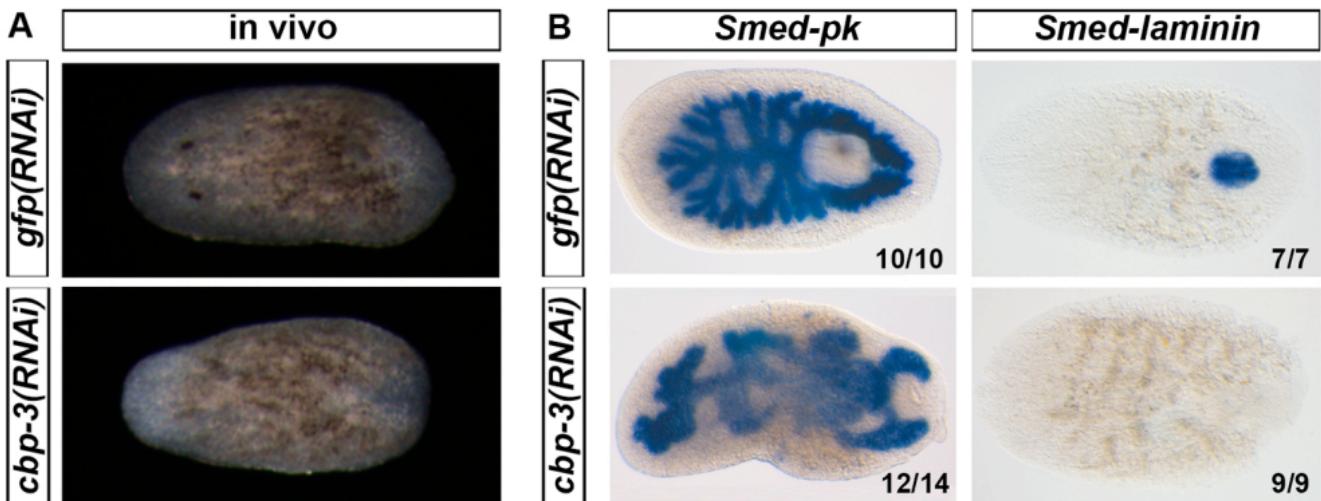


*Smed-th*

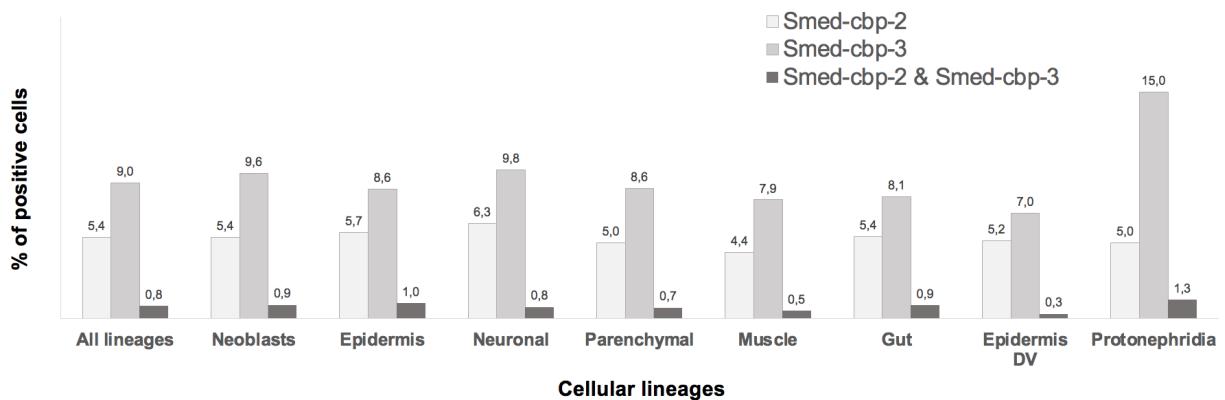




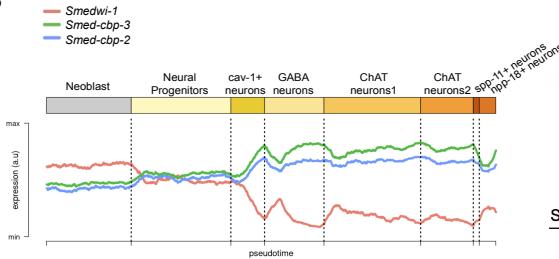




A

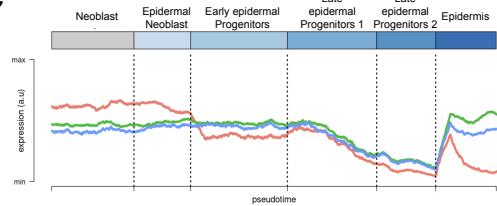


B



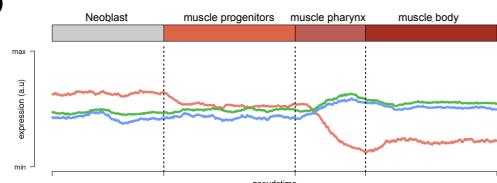
	Number of cells		% of cells	
	Progenitors (Piwi +)	Differentiated (Piwi -)	Progenitors (Piwi +)	Differentiated (Piwi -)
Smed-cbp-2	148	49	99	10,8
Smed-cbp-3	232	58	174	12,8
Smed-cbp-2 & Smed-cbp-3	18	7	11	1,5
# cells neural lineage	2358	453	1905	0,6

C



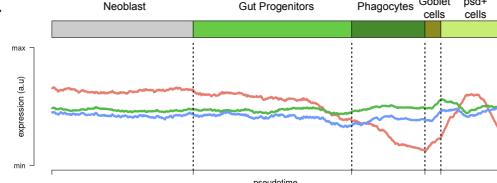
	Number of cells		% of cells	
	Progenitors (Piwi +)	Differentiated (Piwi -)	Progenitors (Piwi +)	Differentiated (Piwi -)
Smed-cbp-2	228	38	190	7,6
Smed-cbp-3	344	52	292	10,4
Smed-cbp-2 & Smed-cbp-3	40	7	33	1,4
# cells epidermal lineage	4009	498	3511	0,9

D



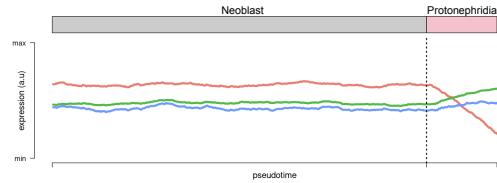
	Number of cells		% of cells	
	Progenitors (Piwi +)	Differentiated (Piwi -)	Progenitors (Piwi +)	Differentiated (Piwi -)
Smed-cbp-2	103	29	74	7,1
Smed-cbp-3	185	60	125	14,7
Smed-cbp-2 & Smed-cbp-3	12	7	5	1,7
# cells muscular lineage	2351	407	1944	0,3

E



	Number of cells		% of cells	
	Progenitors (Piwi +)	Differentiated (Piwi -)	Progenitors (Piwi +)	Differentiated (Piwi -)
Smed-cbp-2	50	24	26	7,8
Smed-cbp-3	74	29	45	9,5
Smed-cbp-2 & Smed-cbp-3	8	1	7	0,3
# cells gut lineage	919	306	613	1,1

F



	Number of cells		% of cells	
	Progenitors (Piwi +)	Differentiated (Piwi -)	Progenitors (Piwi +)	Differentiated (Piwi -)
Smed-cbp-2	4	0	4	0,0
Smed-cbp-3	12	2	10	33,3
Smed-cbp-2 & Smed-cbp-3	1	0	1	0,0
# cells protonephridia lineage	80	6	74	1,4

### Smed-CBP-2 Interactome

Human homologue	Planarian homologue	Confidence	Reference
CDC27	isotig22501	0.643	
COPS2	isotig15449	0.71	
CPSF4	isotig01551	0.656	
			Iglesias et al., 2008 Gurley et al., 2008
CTNNB1 /βcatenin1	isotig23001	0.874	Petersen and Reddien, 2008
	isotig22585	0.83	Chai G et al., 2010 Sureda-Gomez et al., 2016 Su et al., 2017
EP300	isotig22472	0.609	
ETS2	isotig12474	0.831	
	isotig12473	0.798	He et al., 2017
FHL2	isotig25875	0.796	
	isotig15616	0.762	
	isotig21493	0.762	
	isotig13394	0.79	Wagner et al., 2012
	isotig13395	0.766	
GLI3	isotig22707	0.614	Rink et al., 2009
HIPK2	isotig21321	0.626	
			Bayascas et al., 1997 Orii et al., 1999 Currie et al., 2016 Scimone et al., 2016 Tewari et al., 2019
HOXB7	isotig18915	0.61	
HSF1	isotig25963	0.833	
	isotig09567	0.791	
HTT	isotig14108	0.663	
KAT2B	isotig22939	0.891	
KAT5	isotig09000	0.814	
KAT6A	isotig23440	0.775	
KLF1	isotig20465	0.85	
NCOR1	isotig23154	0.873	
NFX1	isotig13021	0.613	Rodriguez-Esteban et al., 2015
NFYA	isotig24638	0.86	Iyer et al., 2016
	isotig24612	0.816	Rodriguez-Esteban et al., 2015
NFYB	isotig18238	0.878	Iyer et al., 2016
	isotig21277	0.82	Rodriguez-Esteban et al., 2015
ONECUT1	isotig25733	0.645	
	isotig22450	0.608	
PIAS3	isotig22235	0.608	
	isotig01445	0.608	
POU2F3	isotig21518	0.774	
PPP2R5E	isotig14006	0.623	
SETD1A	isotig19076	0.786	Duncan et al., 2015 Hubert et al., 2013
SMAD3	isotig13864	0.612	Roberts-Galbraith et al., 2013
SMAD4	isotig25984	0.831	Reddien et al., 2007
SMARCA2 / BAF190	isotig22778	0.755	Trost et al., 2018
SMARCB1	isotig11019	0.608	Rouhana et al., 2017
SND1	isotig13514	0.805	
TDG	isotig23364	0.604	
	isotig07164	0.782	
TGS1	isotig11458	0.755	
	isotig11459	0.738	
TP73 / P53	isotig17795	0.643	Pearson and Sanchez-Alvarado, 2010
TRIP4	isotig23604	0.886	
UBC	isotig00999	0.66	
YY1	isotig14820	0.607	

### Smed-CBP-3 Interactome

Human homologue	Planarian homologue	Confidence	Reference
ASF1B	dd_Smed_v6_5120_0_1	0.78	
BRPF1	dd_Smed_v6_9528_0_1	0.6	
CDC27	dd_Smed_v6_7556_0_1	0.687	
COPS2	dd_Smed_v6_4989_0_1	0.716	
CPSF4	dd_Smed_v6_4069_0_1	0.678	
	dd_Smed_v6_24321_0_1	0.657	
CTBP1	dd_Smed_v6_43551_0_1	0.692	
	dd_Smed_v6_25893_0_1	0.692	
			Iglesias et al., 2008 Gurley et al., 2008
CTNNB1 /βcatenin1	dd_Smed_v6_2688_0_1	0.87	Petersen and Reddien, 2008
	dd_Smed_v6_4850_0_1	0.847	
	dd_Smed_v6_9667_0_1	0.776	
DYRK1B	dd_Smed_v6_3773_0_1	0.617	
	dd_Smed_v6_6670_0_1	0.603	
ETS2	dd_Smed_v6_2092_0_1	0.851	He et al., 2017
	dd_Smed_v6_5037_0_1	0.839	
FHL2	dd_Smed_v6_5014_0_1	0.838	
	dd_Smed_v6_5854_0_1	0.805	
	dd_Smed_v6_2771_0_1	0.805	Wagner et al., 2012
	dd_Smed_v6_34269_0_1	0.797	
FOXO4	dd_Smed_v6_3040_0_1	0.608	
HIPK2	dd_Smed_v6_7724_0_1	0.607	
			Bayascas et al., 1997 Orii et al., 1999 Currie et al., 2016 Scimone et al., 2016 Tewari et al., 2019
HOXB7	dd_Smed_v6_22524_0_1	0.677	
	dd_Smed_v6_16227_0_1	0.658	
HSF1	dd_Smed_v6_7535_0_1	0.825	
	dd_Smed_v6_9099_0_2	0.776	
HTT	dd_Smed_v6_3044_0_1	0.668	
KAT2B	dd_Smed_v6_11453_0_1	0.853	
	dd_Smed_v6_12274_0_1	0.786	
KAT5	dd_Smed_v6_4708_0_1	0.811	
MSX1	dd_Smed_v6_18505_0_1	0.603	Mannini et al., 2008
NCOR1	dd_Smed_v6_7709_0_1	0.792	
NEUROG1	dd_Smed_v6_9904_0_1	0.646	Cowles et al., 2013
	dd_Smed_v6_26877_0_1	0.646	Monjo and Romero, 2015
NFYA	dd_Smed_v6_4860_0_1	0.867	
	dd_Smed_v6_18122_0_1	0.839	
	dd_Smed_v6_8585_0_1	0.82	
NFYB	dd_Smed_v6_5828_0_1	0.809	Iyer et al., 2016 Rodriguez-Esteban et al., 2015
	dd_Smed_v6_16472_0_1	0.731	
ONECUT1	dd_Smed_v6_25197_0_1	0.672	
	dd_Smed_v6_7877_0_1	0.672	
PSMC5	dd_Smed_v6_1176_0_1	0.608	
	dd_Smed_v6_3565_0_2	0.651	Sandmann et al., 2011 Wenemoser et al., 2012 Dong et al., 2018
RUNX1	dd_Smed_v6_3565_0_2	0.651	
SETD1A	dd_Smed_v6_9988_0_1	0.753	Duncan et al., 2015 Hubert et al., 2013
SMAD2	dd_Smed_v6_8193_0_1	0.673	Roberts-Galbraith et al., 2013
SMAD4	dd_Smed_v6_1923_0_1	0.832	Reddien et al., 2007
	dd_Smed_v6_19757_0_1	0.774	
SMARCA2 / BAF190	dd_Smed_v6_16980_0_1	0.748	Trost et al., 2018
SND1	dd_Smed_v6_906_0_1	0.752	
	dd_Smed_v6_8618_0_1	0.935	
	dd_Smed_v6_12273_0_1	0.904	
	dd_Smed_v6_14019_0_1	0.886	
TGS1	dd_Smed_v6_11559_0_1	0.761	
	dd_Smed_v6_9949_0_1	0.734	
TP73 / p53	dd_Smed_v6_5563_0_1	0.698	Pearson and Sanchez-Alvarado, 2010
TRIP4	dd_Smed_v6_9211_0_1	0.889	
UBE2D1	dd_Smed_v6_6773_0_1	0.705	
YY1	dd_Smed_v6_10092_0_1	0.61	