

Supplemental Table 1. List of primary and secondary antibodies used in experiments. IF indicates immunofluorescence; FC indicates flow cytometry; WB indicates western blot.

A. Primary antibodies

Antigen	Host species	Type	Clone	Conjugates	Dilution	Source
F4/80	Rat IgG2a	monoclonal	BM8	PE	1:200 (FC)	Biolegend
Isotype Ctrl	Rat IgG2a	monoclonal	RTK2758	PE	1:200 (FC)	Biolegend
CD45	Rat IgG2b	monoclonal	30-F11	PerCP/Cy5.5	1:200 (FC)	Biolegend
CD11c	Armenian Hamster IgG	monoclonal	N418	Pacific Blue	1:200 (FC)	Biolegend
CD3	Rat IgG2b	monoclonal	17A2	PE/Cy7	1:200 (FC)	Biolegend
CD19	Rat IgG2a	monoclonal	6D5	PE/Cy7	1:200 (FC)	Biolegend
CD206	Rat IgG2a	monoclonal	CO68C2	Alexa Fluor 488	1:100 (IF)	Biolegend
CD11b (Mac-1)	Rat IgG2b	monoclonal	M1/70	Alexa Fluor 594	1:100 (IF)	Biolegend
HuC/D	Human	polyclonal		unconjugated	1:20,000 (IF)	V. Lennon (Mayo)
pSTAT3	Rabbit IgG	monoclonal	D3A7	unconjugated	1:100 (IF)	Cell Signaling
Asp175	Rabbit IgG	monoclonal	5A1E	unconjugated	1:300 (IF)	Cell Signaling
IL-6	Rabbit	polyclonal		unconjugated	1:1000 (WB)	Abcam
FoxO3	Rabbit IgG	monoclonal	D19A7	unconjugated	1:1000 (WB)	Cell Signaling
GAPDH	Mouse IgG2b	monoclonal	Sp2/0	unconjugated	1:2000 (WB)	Abcam
β -tubulin	Rabbit	polyclonal		unconjugated	1:1000 (WB)	Abcam

B. Secondary antibodies

Antibody	Dilution	Source
goat-anti-human Alexa Fluor 594	1:300	Jackson ImmunoResearch
goat-anti-rabbit Alexa Fluor 488	1:300	Jackson ImmunoResearch
goat-anti-human Alexa Fluor 405	1:300	Jackson ImmunoResearch
goat-anti-mouse HRP Conjugate	1:10,000 (WB)	Bio-Rad
goat-anti-rabbit HRP Conjugate	1:10,000 (WB)	Bio-Rad

Supplemental Table 2. Taqman gene expression gene expression assays used in experiments.

Gene	Source or sequence
IL-6	Mm00446190 (Applied Biosystems)
Foxo3	Mm01185722 (Applied Biosystems)
Gapdh	Mm99999915 (Applied Biosystems)
TNF α	forward, 5'- CCAAAGGGATGAGAAGTTCC -3' reverse, 5'- CTCCACTTGGTGGTTTGCTA -3' probe, 5'- TGGCCCAGACCCTCACACTCA -3'
iNOS	forward, 5'- ACCTTGTTTCAGCTACGCCTT -3' reverse, 5'- TCTTCAGAGTCTGCCCATTTG -3' probe, 5'- TGCTCCTCTTCCAAGGTGCTTGC -3'
CD206	forward, 5'- TGATTACGAGCAGTGGAAGC -3' reverse, 5'- GTTCACCGTAAGCCCAATTT -3' probe, 5'- CACCTGGAGTGATGGTTCTCCCG -3'
FIZZ1	forward, 5'- AGGAACTTCTTGCCAATCCA -3' reverse, 5'- ACAAGCACACCCAGTAGCAG -3' probe, 5'- CCTCCTGCCCTGCTGGGATG -3'
TGF β	forward, 5'- CCCTATATTTGGAGCCTGGA -3' reverse, 5'- CTTGCGACCCACGTAGTAGA -3' probe, 5'- CCGCAGGCTTTGGAGCCACT -3'

Supplemental Table 3. Counts of cleaved caspase-3 (Asp175) expressing enteric neurons.

Mouse	Young		Old		3 Months				12 Months				20 Months			
	Hu ⁺	Asp175 ⁺ Hu ⁺	Hu ⁺	Asp175 ⁺ Hu ⁺	WT		FoxO3 ^{-/-}		WT		FoxO3 ^{-/-}		WT		FoxO3 ^{-/-}	
					Hu ⁺	Asp175 ⁺ Hu ⁺	Hu ⁺	Asp175 ⁺ Hu ⁺	Hu ⁺	Asp175 ⁺ Hu ⁺	Hu ⁺	Asp175 ⁺ Hu ⁺	Hu ⁺	Asp175 ⁺ Hu ⁺	Hu ⁺	Asp175 ⁺ Hu ⁺
1	222	59	323	127	247	45	247	61	282	71	208	82	184	53	234	97
2	315	73	410	126	240	31	278	80	266	91	248	116	171	49	201	87
3	343	71	315	119	270	56	238	66	197	52	221	99	240	41	222	72
4	297	72	355	121	260	47	253	79	179	48	292	115	198	52	253	88
5	287	76			206	33			208	57	173	69	213	69		
6	298	80							206	77						
total counts	1762	431	1403	493	1223	212	1016	286	1338	396	1142	481	1006	264	910	344