

Name in Z-Brain Database	# of fish	References/Notes
-6.7FRhcrtR-Gal4-uasKaede	12	Tg(-6.7FRhcrtR:Gal4): Lacoste et al., (2015) Current Biology, 1–10. doi:10.1016/j.cub.2015.04.025, Tg(Uas:Kaede) Scott et al., (2007) Nature Methods. doi:10.1038/nmeth1033
Anti-5HT	40	Sigma S5545, used 1:100
Anti-Gad67	17	Stains Gad65 + Gad67, Millipore ab11070, used 1:100
Anti-GlyR	160	Synaptic Systems mAb4a, used 1:100, <a href="http://www.sysy.com/products/glyrec/facts-146011.php">http://www.sysy.com/products/glyrec/facts-146011.php</a>
Anti-TH	10	Millipore AB152, used 1:500
Anti-Zn12(Hnk-1)	9	ZIRC antibody collection, used 1:500, <a href="http://zfin.org/ZDB-ATB-081002-12">http://zfin.org/ZDB-ATB-081002-12</a>
Anti-Zn1	10	ZIRC antibody collection, used 1:1000, <a href="http://zfin.org/ZDB-ATB-081002-9">http://zfin.org/ZDB-ATB-081002-9</a>
Anti-Znp1(Synaptotagmin2)	118	Developmental Studies Hybridoma Bank, used 1:200, <a href="http://dshb.biology.uiowa.edu/motor-neuron-axons">http://dshb.biology.uiowa.edu/motor-neuron-axons</a>
Anti-Zrf1(GFAP)	5	ZIRC antibody collection, used 1:1000, <a href="http://zfin.org/ZDB-ATB-081002-46">http://zfin.org/ZDB-ATB-081002-46</a>
Anti-Zrf2	5	ZIRC antibody collection, used 1:500, <a href="http://zfin.org/ZDB-ATB-081002-47">http://zfin.org/ZDB-ATB-081002-47</a>
Anti-tERK	193	ZIRC antibody collection, used 1:500, Cell Signalling #4696, <a href="http://www.cellsignal.com/product/productDetail.jsp?productId=4696">http://www.cellsignal.com/product/productDetail.jsp?productId=4696</a>
Elavl3-GCaMP5G	7	Tg(Elavl3:GCaMP5G): Ahrens et al., (2013) Nature Methods, 10(5), 413–420. doi:10.1038/nmeth.2434
Elavl3-H2BRFP	10	Tg(Elavl3-H2B-RFP): Created by Clemens Riegler
EtVmat2-GFP	55	Et(Vmat2:GFP): Wen et al., (2008) Developmental Biology, 314(1), 84–92. doi:10.1016/j.ydbio.2007.11.012
Gad1b-GFP	10	Tg(Gad1b:GFP): Satou et al., (2013) Development, 140(18), 3927–3931. doi:10.1242/dev.099531
Glyt2-GFP	13	Tg(Glyt2:GFP): McLean et al., (2007) Nature, 446(7131), 71–75. doi:10.1038/nature05588
Hcrt-RFP	15	Tg(Hcrt:mRFP): Liu et al., (2015) Development. doi:10.1242/dev.117424
Isl1-GFP	17	Tg(Is1:GFP): Higashijima et al., (2000). The Journal of Neuroscience 20(1), 206–218.
Isl2bGal4-uasDendra	8	Tg(Is1:GFP): Fredj et al., (2010) The Journal of Neuroscience 30(32), 10939–10951. doi:10.1523/JNEUROSCI.1556-10.2010
Olig2-GFP	12	Tg(Olig2:GFP): Shin et al., (2003) Methods in Cell Science, 25(1-2), 7–14. doi:10.1023/B:MICS.0000006847.09037.3a
Otpb.A:NsfB-GFP	10	Tg(otpA:nfsB-egfp)zc77: Lambert et al., (2012) The Journal of Neuroscience, 32(39), 13488–13500. doi:10.1523/JNEUROSCI.1638-12.2012
Otpb.A-Gal4-UAS-GCaMP	19	Tg(UAS:GCaMP5G): was created by Adam Douglass and Jared Wortzman, Tg(otpA:Gal4-VP16)zc57: Fujimoto et al., (2011) Developmental Biology, 352(2), 393–404. doi:10.1016/j.ydbio.2011.01.023
Oxtl-GFP	68	Tg(Oxtl:GFP): Coffey et al., (2013) PLoS ONE, 8(1), e53991. doi:10.1371/journal.pone.0053991.s007
Pet1-GFP	13	Tg(Pet1:GFP): Lillesaar et al., (2009) The Journal of Comparative Neurology, 512(2), 158–182. doi:10.1002/cne.21887
Ptf1aGal4-uasKaede	11	Tg(Ptf1a:Gal4): Parsons et al., (2009). Mechanisms of Development, 126(10), 898–912. doi:10.1016/j.mod.2009.07.002, Tg(Uas:Kaede) Scott et al., (2007) Nature Methods. doi:10.1038/nmeth1033
Qrfp-GFP	15	Tg(Qrfp:GFP): Liu et al., (2015) Development. doi:10.1242/dev.117424
S1181tGal4-uasKaede	14	Et(fos:Gal4-VP16)s1181t: Scott and Baier (2009). Frontiers in Neural Circuits, 3, 13. doi:10.3389/neuro.04.013.2009, Tg(Uas:Kaede) Scott et al., (2007) Nature Methods. doi:10.1038/nmeth1033
SpinalBackfills	23	Kimmel et al., (1982) The Journal of Comparative Neurology, 205(2), 112–127. doi:10.1002/cne.902050203
Vglut2a-GFP	15	Tg(Vglut2a:GFP): Bae et al., (2009) Developmental Biology, 330(2), 406–426. doi:10.1016/j.ydbio.2009.04.013

**Supplementary Table 1:** Information about the anatomical labels contained in the Z-

Brain.