

Database of Normative Scores for Mouse Behavioral Assays

Sources of original data from Wildtype (WT) control and Vehicle treated control mice

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2013-2020 references compiled by Jacqueline Crawley, RBC Director

Arid1B WT controls

C57B/5NJ background

Ellegood, Silverman et al., *Translational Psychiatry*, in press.

C57BL/6J inbred strain

Purchased from The Jackson Laboratory, Stock No: 000664, bred in
Research II vivarium, UC Davis, Sacramento, California

Jacqueline Crawley, Unpublished data

C57BL/6J – IL2

Jill Silverman, unpublished data

C57BL/6J – Rag1

Jill Silverman, unpublished data

Chd8 WT controls

C57BL/6N background

Gompers AL, Su-Feher L, Ellegood J, Copping NA, Asrafuzzaman Riyadh M, Stradleigh TW, Pride MC, Schaffler MD, Wade A, 1,2, Catta-Preta R, Zdilar I, Louis S, Kaushik G, Mannion BJ, Plajzer-Frick I, Afzal V, Visel A, Pennacchio LA, Dickel DE, Lerch JP, Crawley JN, Zarbalis KS, Silverman JL, Nord AS. Germline *Chd8* haploinsufficiency alters brain development in mouse, *Nature Neuroscience*, 20:1062–1073, 2017.

Cntnap2 WT controls

C57BL/6J background

Preclinical Autism Consortium for Therapeutics (PACT), supported by Autism Speaks

Jacqueline Crawley, unpublished data

Fmr1 WT controls

FVB/AntJ background

Preclinical Autism Consortium for Therapeutics (PACT), supported by Autism Speaks

Jacqueline Crawley, unpublished data

Gaboxadol vehicle controls

C57BL/6J background

Rhine MA,* Parrott JM,* , Schultz MN, Kazdoba TM, Crawley JN.

Hypothesis-driven investigation of pharmacological targets in two mouse models of autism, *Autism Research*, 12:401-421, 2019.

Gabrb3 WT controls

C57BL/6J.129 background

Preclinical Autism Consortium for Therapeutics (PACT), supported by Autism Speaks

Jacqueline Crawley, unpublished data

Ganaxolone vehicle controls

C57BL/6J background

Kazdoba TM, Hagerman RJ, Zolkowska D, Rogawski MA, Crawley JN. Evaluation of the neurosteroid ganaxolone on social and repetitive behaviors in the BTBR mouse model of autism. *Psychopharmacology* 233:309-323, 2016.

Grin2b WT controls

C57BL/6J background

Preclinical Autism Consortium for Therapeutics (PACT), supported by Autism Speaks

Jacqueline Crawley, unpublished data

H2KbDb WT controls

C57BL/6J.C57BL/6N mixed background

Kimberly McAllister, unpublished data

Maternal autoantibody related (MAR) vehicle controls

C57BL/6J background

Jones KL, Pride MC, Edmiston E, Yang M, Silverman JL, Crawley JN, Van de Water J. Autism-specific maternal autoantibodies produce behavioral abnormalities in an endogenous antigen-driven mouse model of autism. *Mol Psychiatry*, doi: 10.1038/s41380-018-0126-1, 2018.

Mecp2 e1 WT controls

C57BL/6J background

Ciernia AV, Yasui DH, Pride MC, Durbin-Johnson B, Noronha A, Chang A, Knotts T, Rutkowsky J, Ramsey JJ, Crawley JN, LaSalle JM. MeCP2 isoform e1 mutant mice recapitulate motor and metabolic phenotypes of Rett syndrome. *Hum Mol Genetics* 27:4077-4093, 2018.

Prader-Willi Syndrome (PWS) WT controls
C57BL/6J background

Adhikari A, Copping NA, Onaga B, Pride MC, Coulson RL, Yang M, Yasui DH, LaSalle JM, Silverman JL, Cognitive deficits in the *Snord116* deletion mouse model for Prader-Willi syndrome. *Neurobiology of Learning and Memory* 165: 106874, 2019.

Pten WT controls

C57BL/6.129 mixed background, purchased from National Cancer Center Mouse Repository
Preclinical Autism Consortium for Therapeutics (PACT), supported by Autism Speaks
Jacqueline Crawley, unpublished data

Rbx2, Rd8 WT controls

Sergi Simo, unpublished data

Scn1a WT controls

C57BL/6J background

Alex Nord, Unpublished data

Shank3B WT controls

C57BL/6J background

Preclinical Autism Consortium for Therapeutics (PACT), supported by Autism Speaks

Dahmne SC+, Silverman JL+, Super CE, Lammers SHT, Hameed MQ, Modi ME, Copping NA, Pride MC, Smith DG, Rotenberg A*, Crawley JN*, Sahin M*. Replicable in vivo physiological and behavioral phenotypes of the *Shank3B* null mutant mouse model of autism. *Molecular Autism* 8:26:1-19, 2017.

SynDIG4 WT controls

C57BL/6N.C57BL/6J mixed background

Matt L, Kirk LM, Chenaux G, Specca DJ, Puhger KR, Pride MC, Qneibi M, Haham T, Stern-Bach Y, Silver JL, Crawley JN, Hell JW, Diaz E. *SynDIG4/Prrt1* is required for excitatory synapse development and plasticity underlying cognitive function. *Cell Reports*, 22:2246-2253, 2018.

Ube3a WT controls, massed and spaced training

C57BL/6J background

Lauterborn JC, Schultz MN, Le AA, Amani M, Friedman AE, Leach PT, Gall CM, Lynch GS, Crawley JN. Spaced training improves learning in Ts65Dn and *Ube3a* mouse models of intellectual disabilities. *Translational Psychiatry* 9:166, 2019.

Vangl2 WT controls

C57BL/6J background

Chengji Zhou, Unpublished data

Wdfy3 WT controls

C57BL/6J background

Le Duc D, Giulivi C, Hiatt SM, Napoli E, Panoutsopoulos A, Harlan De Crescenzo A, Kotzaeridou U, Syrbe S, Anagnostou E, Azage M, Bend R, Begtrup A, Brown NJ, Büttner B, Cho MT, Cooper GM, Doering JH, Dubourg C, Everman DB, Hildebrand MS, Santos FJR, Kellam B, Keller-Ramey J, Lemke JR, Liu S, Niyazov D, Payne K, Person R, Quélin C, Schnur RE, Smith BT, Strober J, Walker S, Wallis M, Walsh L, Yang S, Yuen RKC, Ziegler A, Sticht H, Pride MC, Orosco L, Martínez-Cerdeño V, Silverman JL, Crawley JN, Scherer SW, Zarbalis KS, Jamra R. Pathogenic *WDFY3* variants cause neurodevelopmental disorders and opposing effects on brain size. *Brain*, 142:2617-2630, 2019.