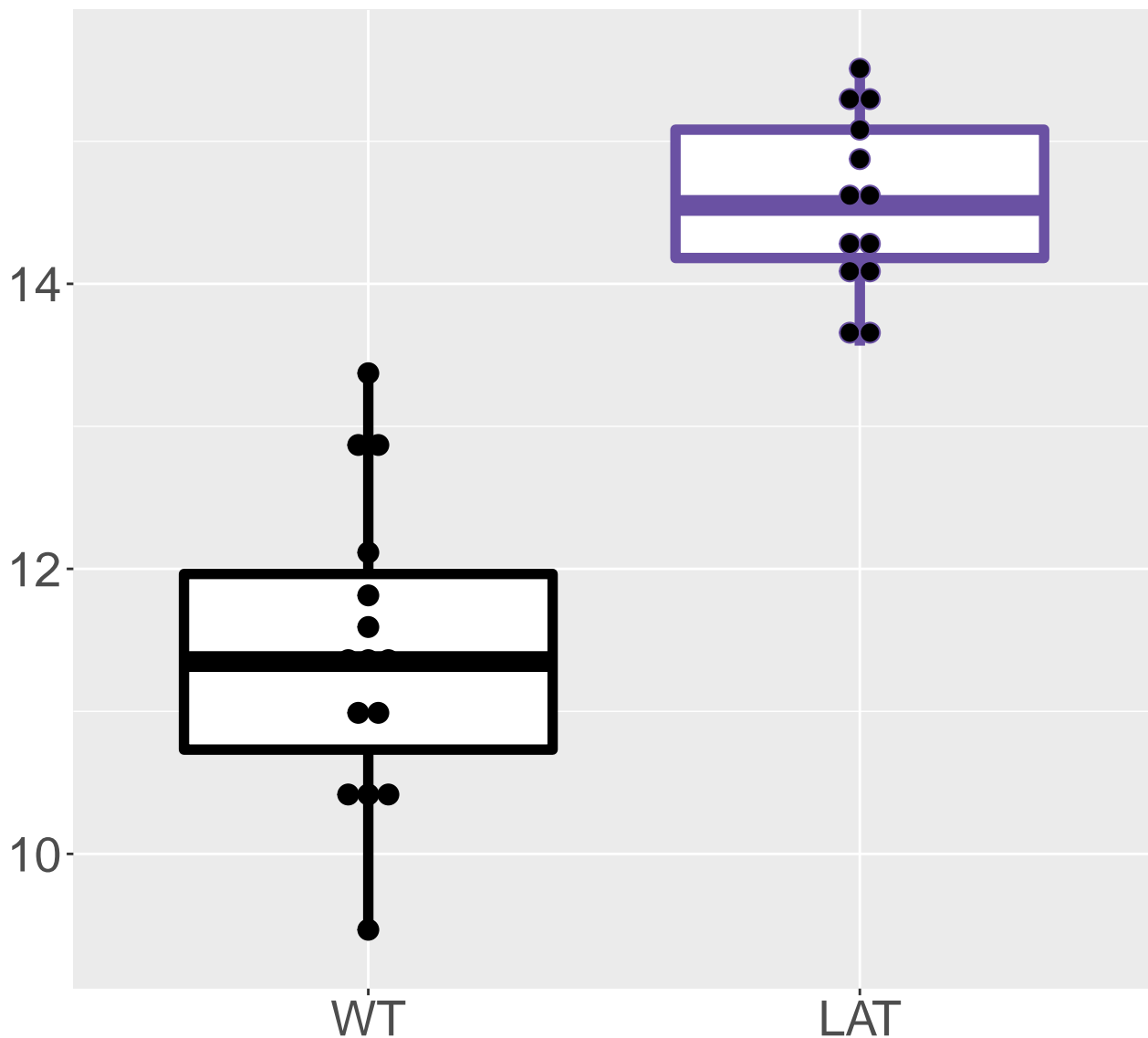


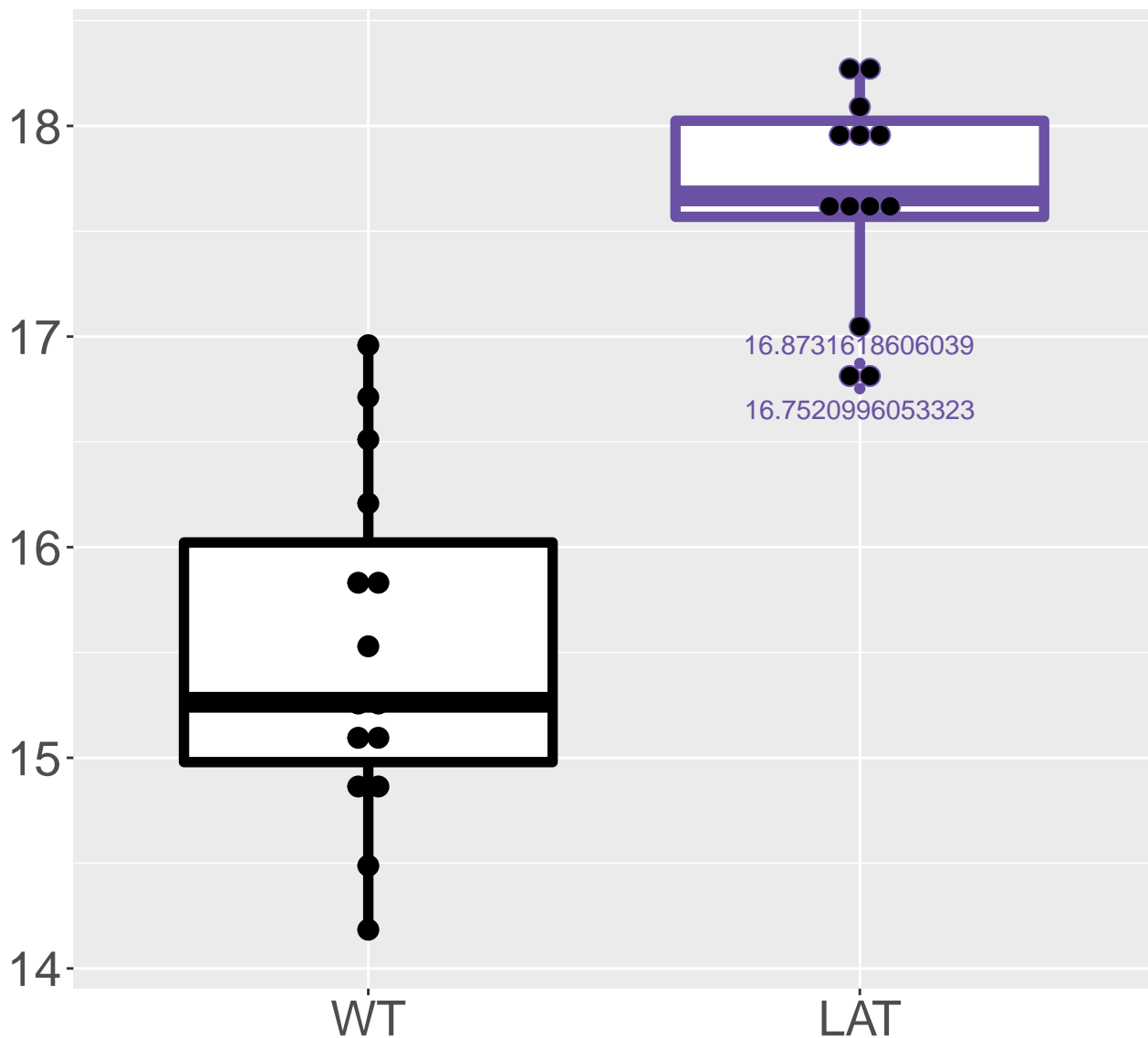
**M201.5621T622.38**

**FDR = 2.5e-08, FC = 3.1, sex\***



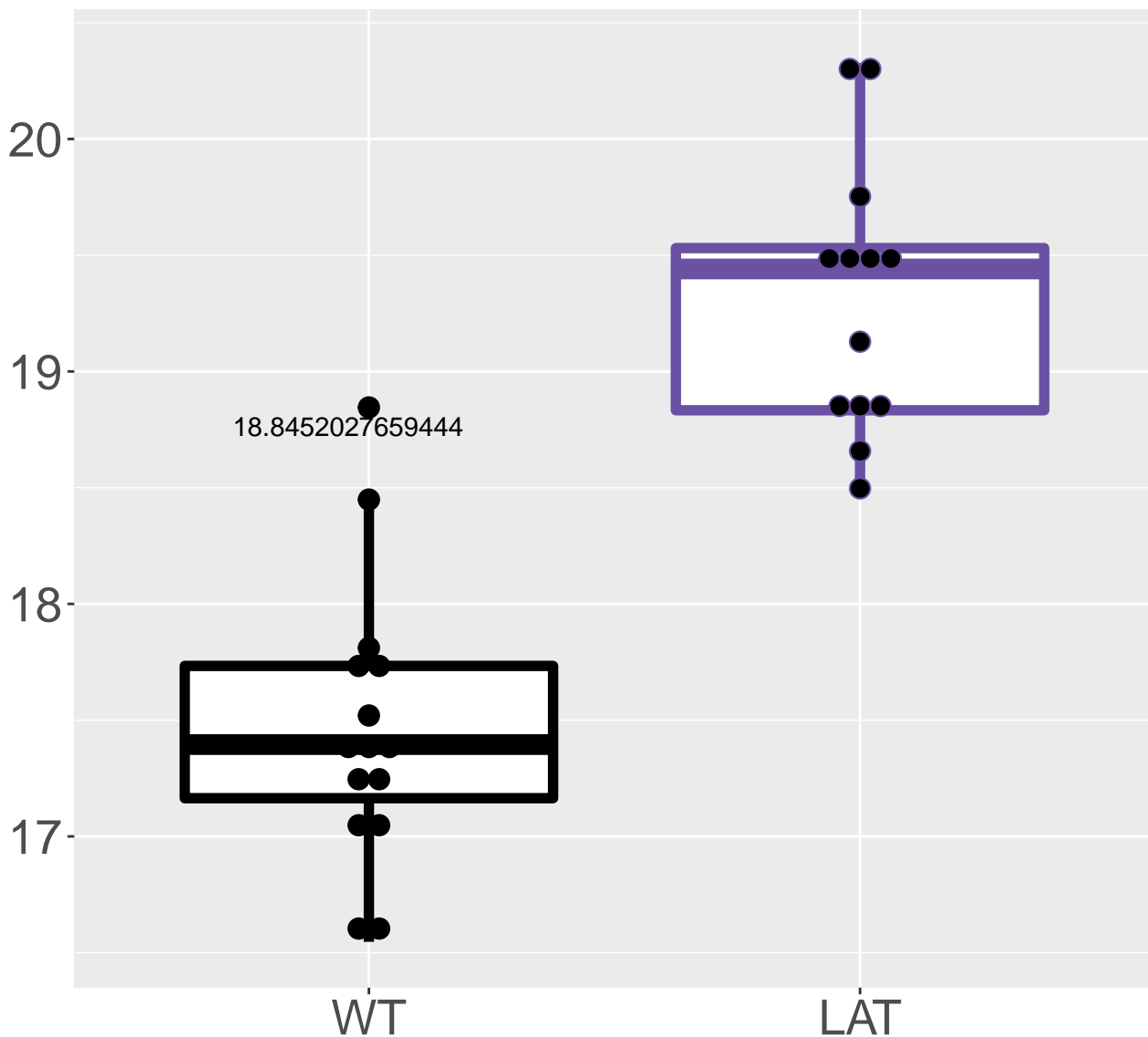
**M319.5201T605.46**

**FDR = 2.5e-08, FC = 2.2, sex\*\*\***



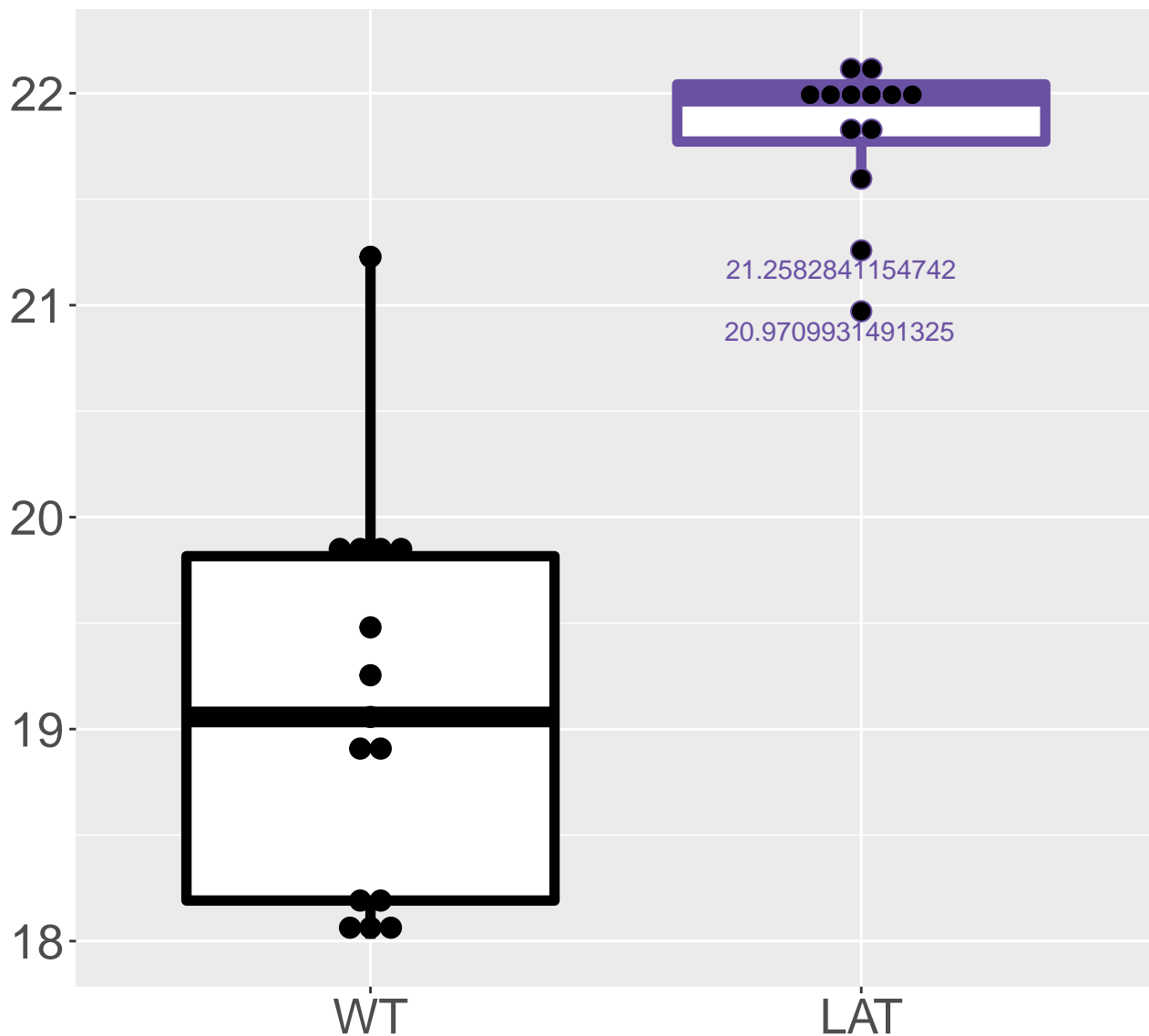
**M326.9893T552.22**

**FDR = 2.5e-08, FC = 1.8, sex\*\***



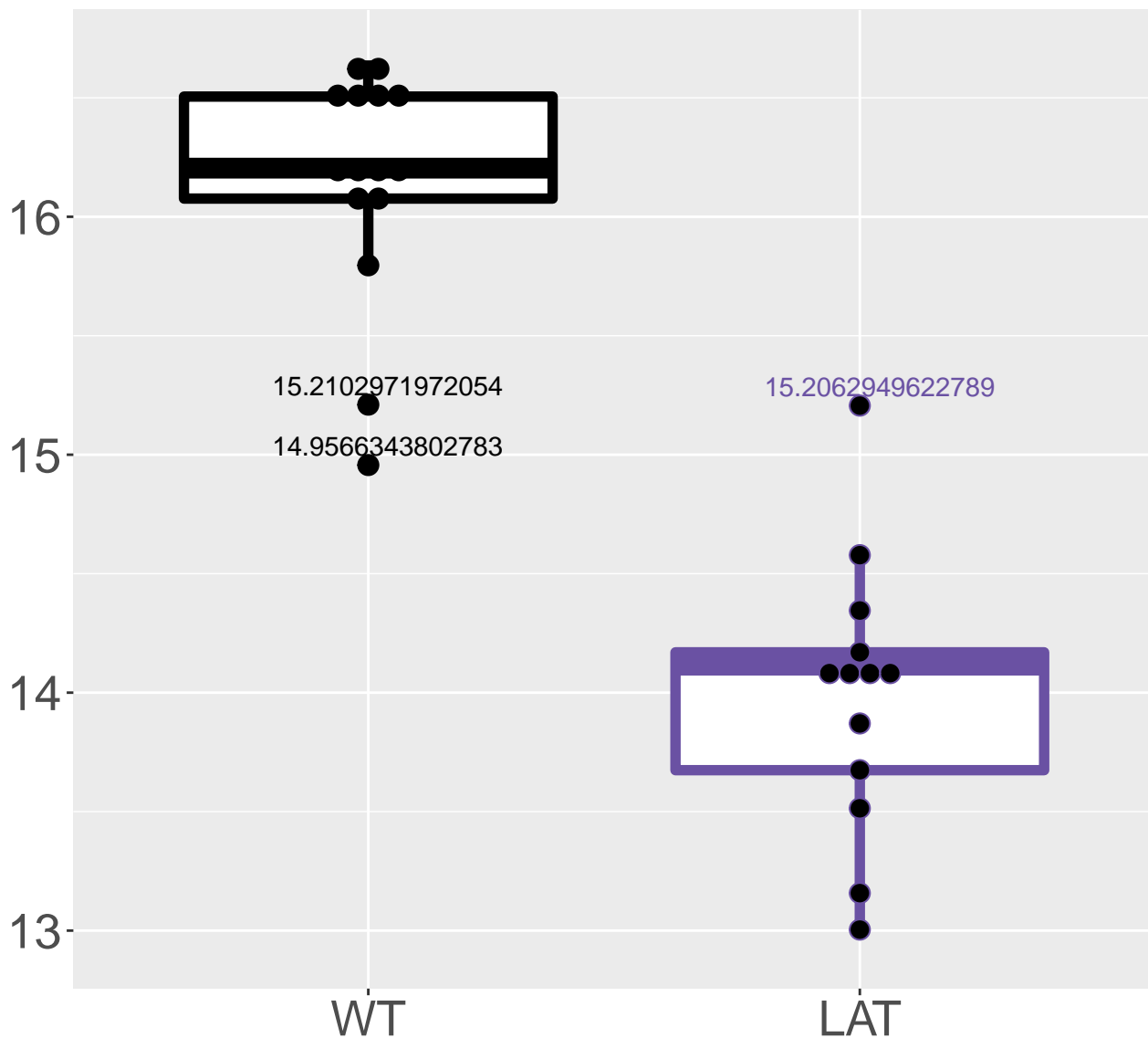
**M248.0792T138.66**

**FDR = 2.8e-08, FC = 2.7**



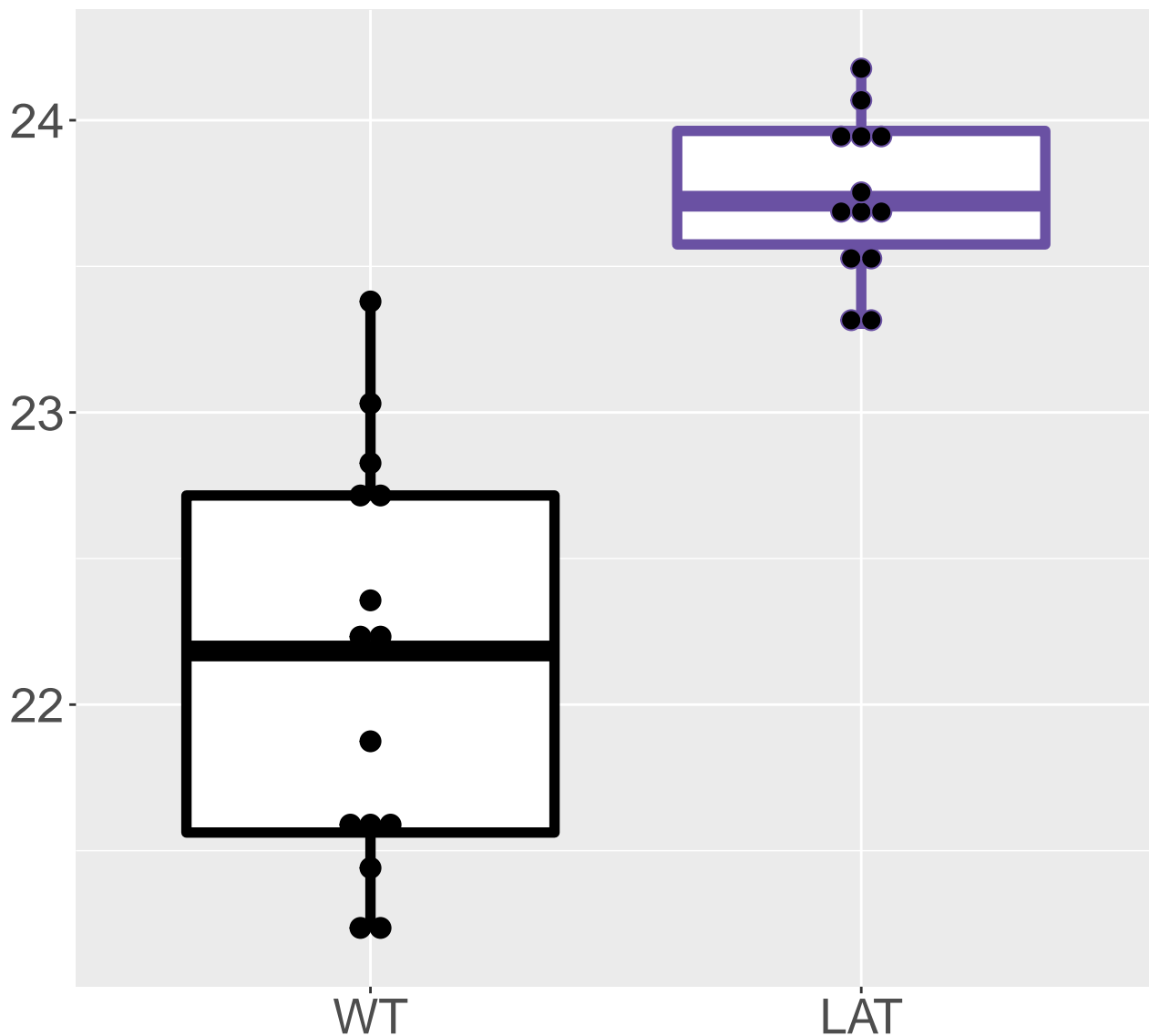
**M337.1259T301.28**

**FDR = 2.9e-08, FC = -2.1**

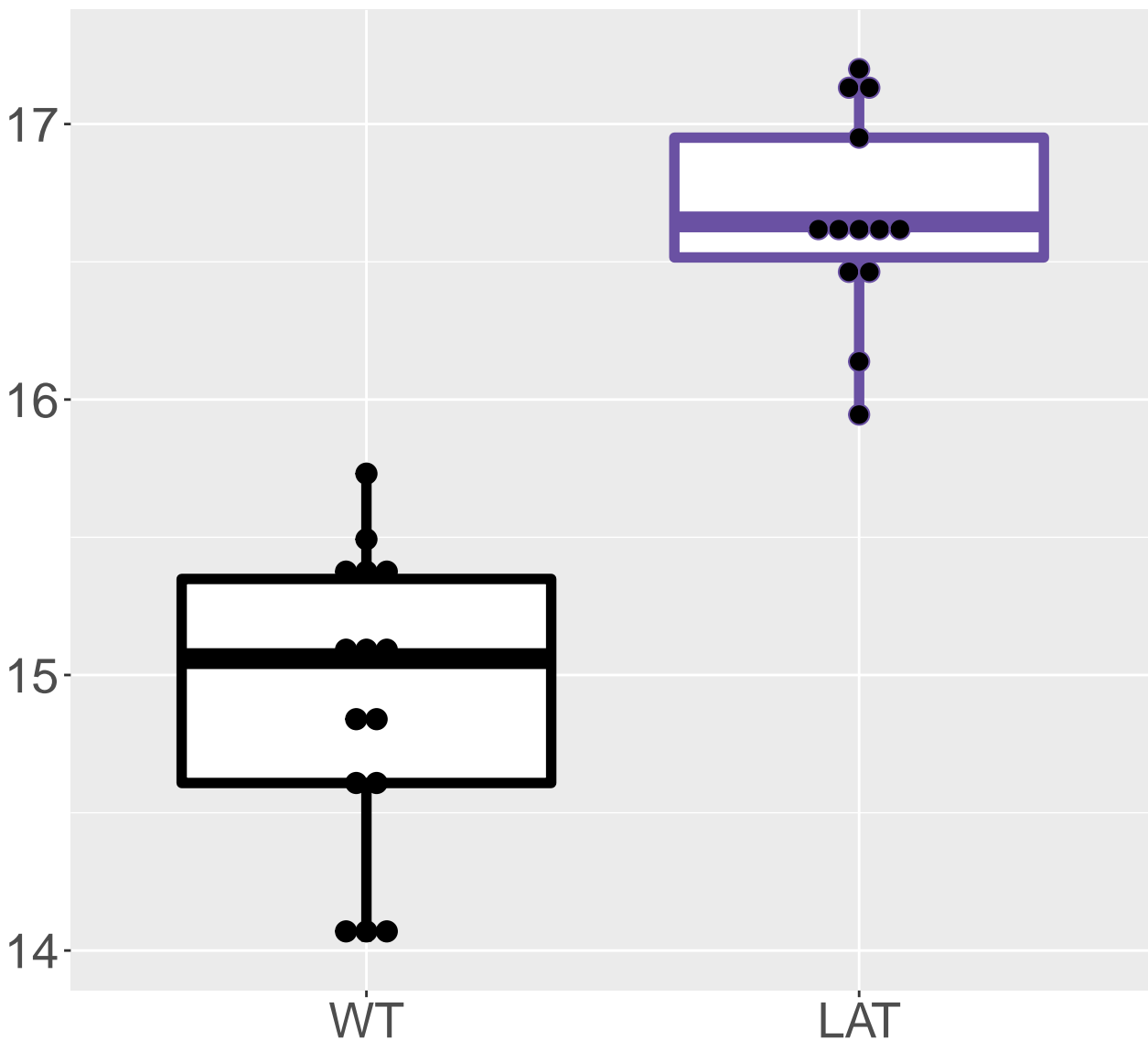


**M535.1549T306.55**

**FDR = 1.5e-07, FC = 1.6, sex\*\***

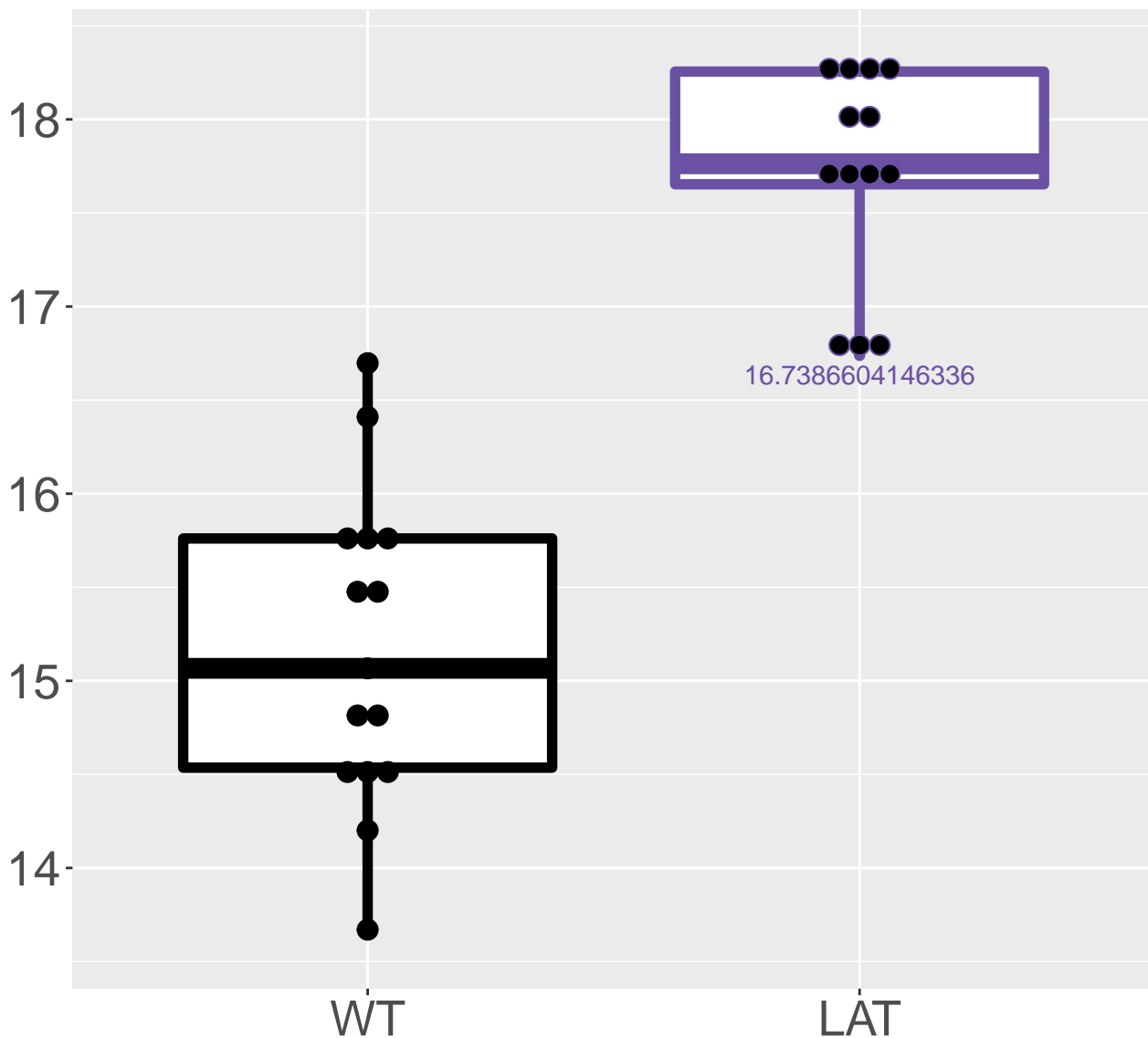


**FDR = 1.5e-07, FC = 1.7**



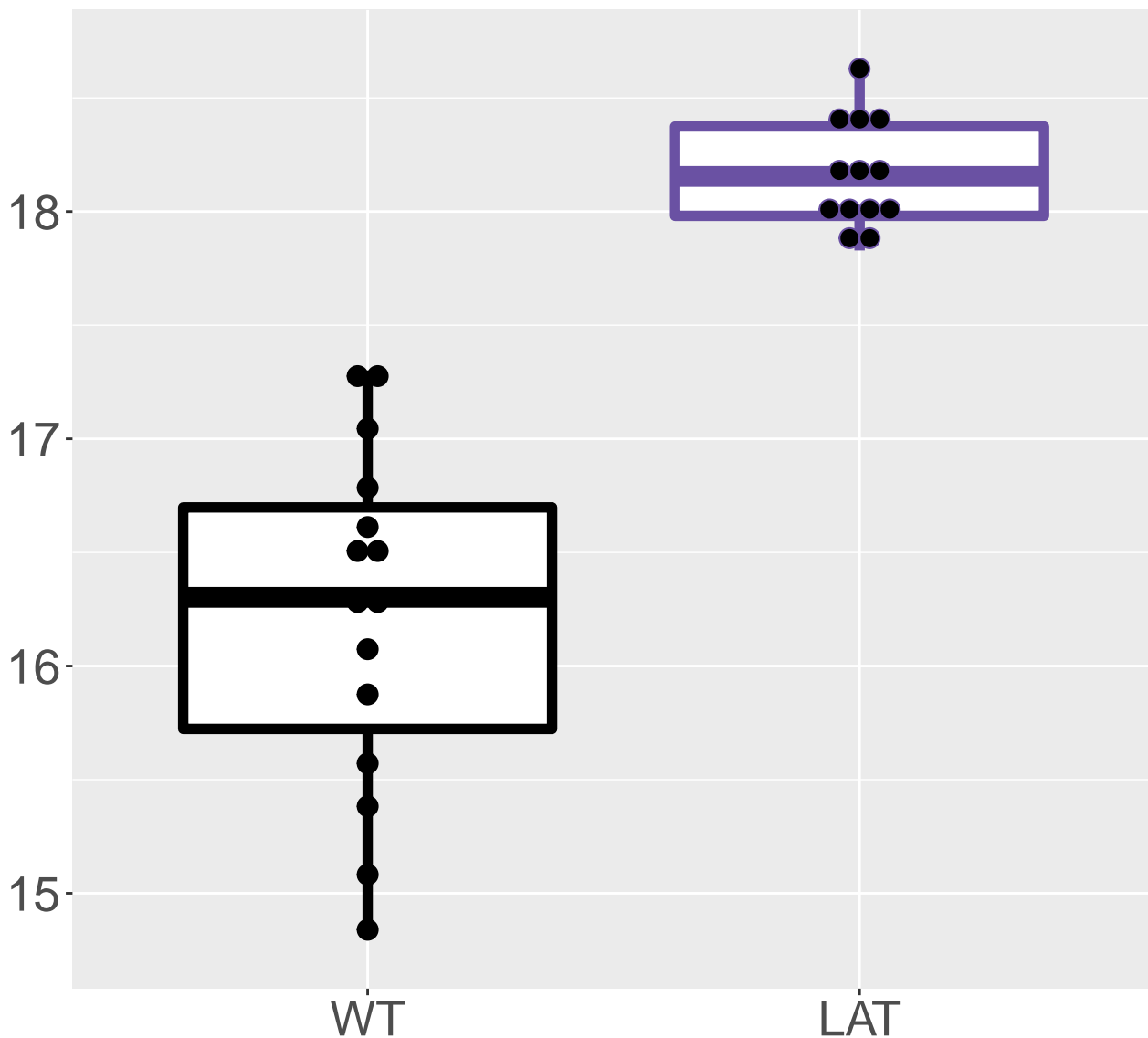
**M273.0385T535.7**

**FDR = 2.6e-07, FC = 2.6**



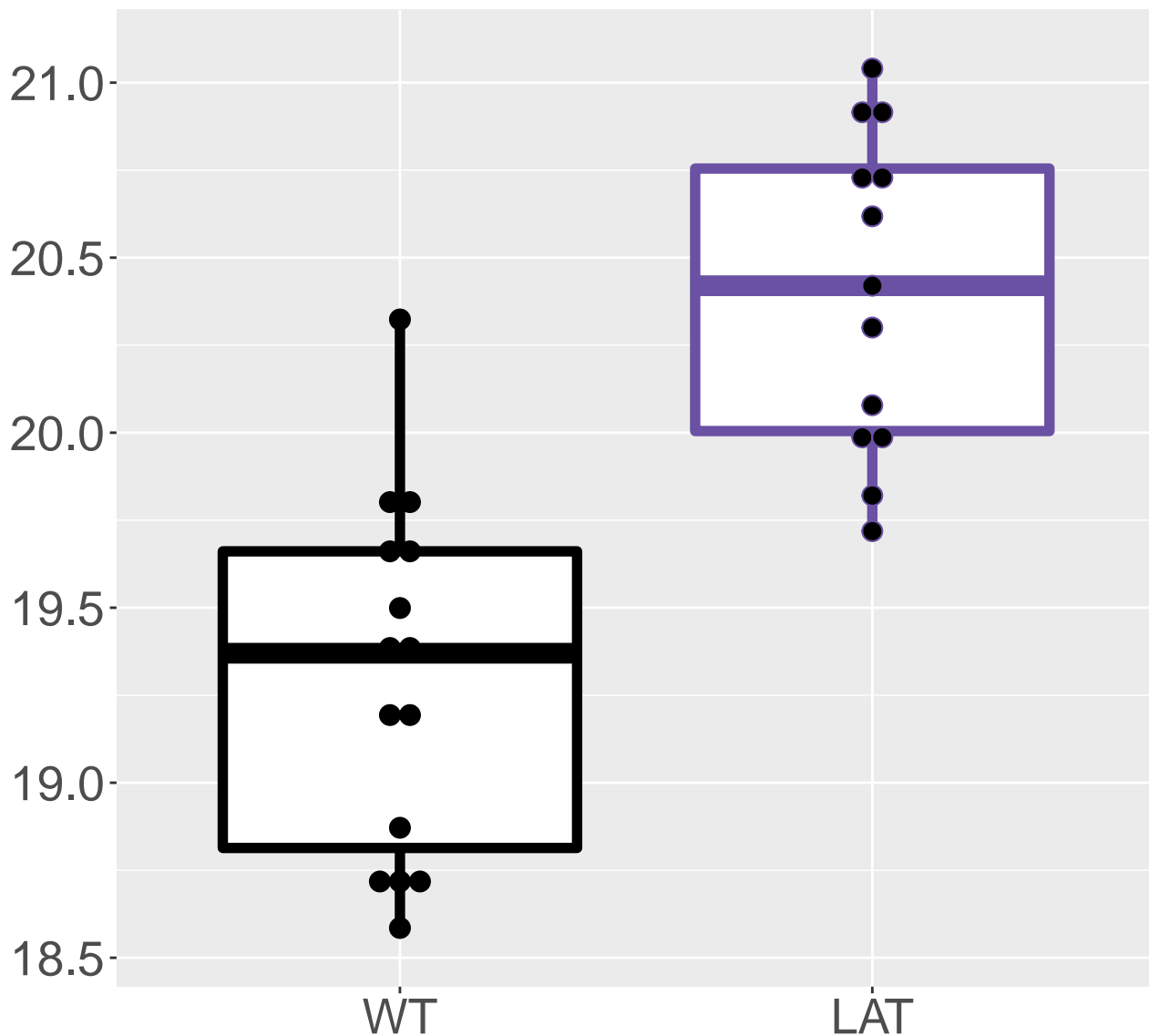


**M228.0282T541.11**  
**FDR = 2.7e-07, FC = 1.9**



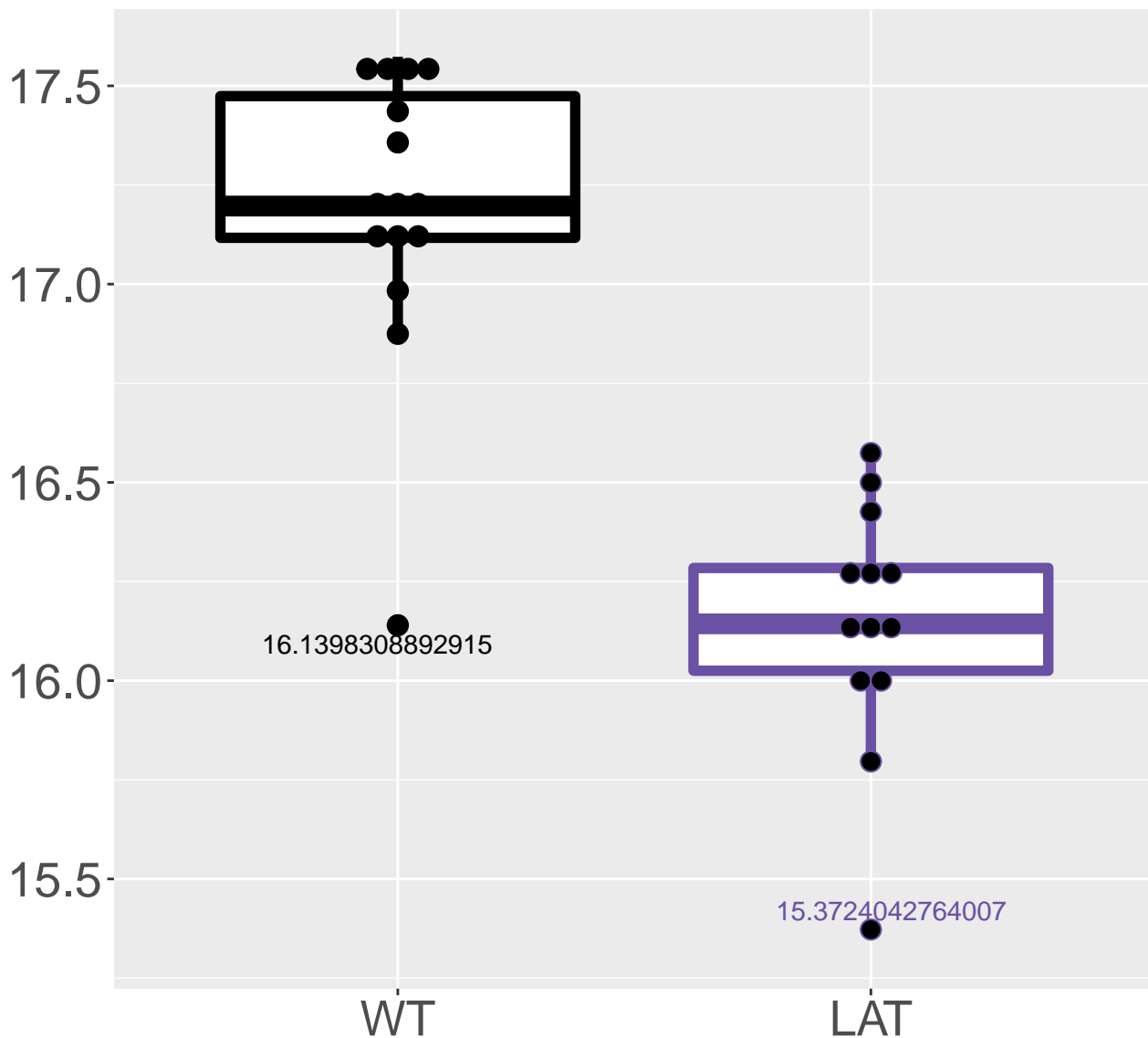
# Guanosine

FDR =  $3.9\text{e-}07$ , FC = 1.1, sex\*\*\*



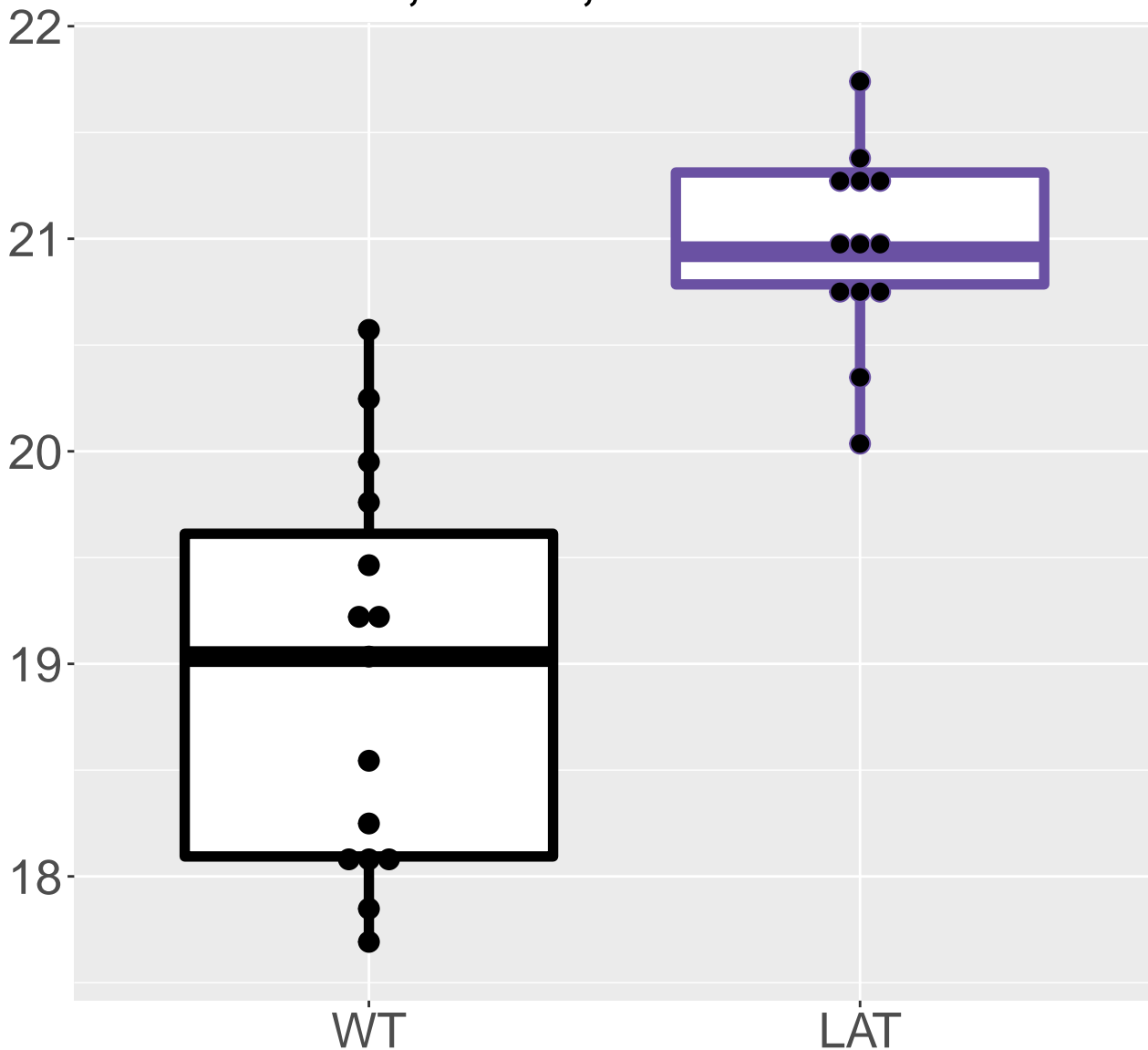
**M462.1471T499.14**

**FDR =  $4.7e-07$ , FC =  $-1.1$**



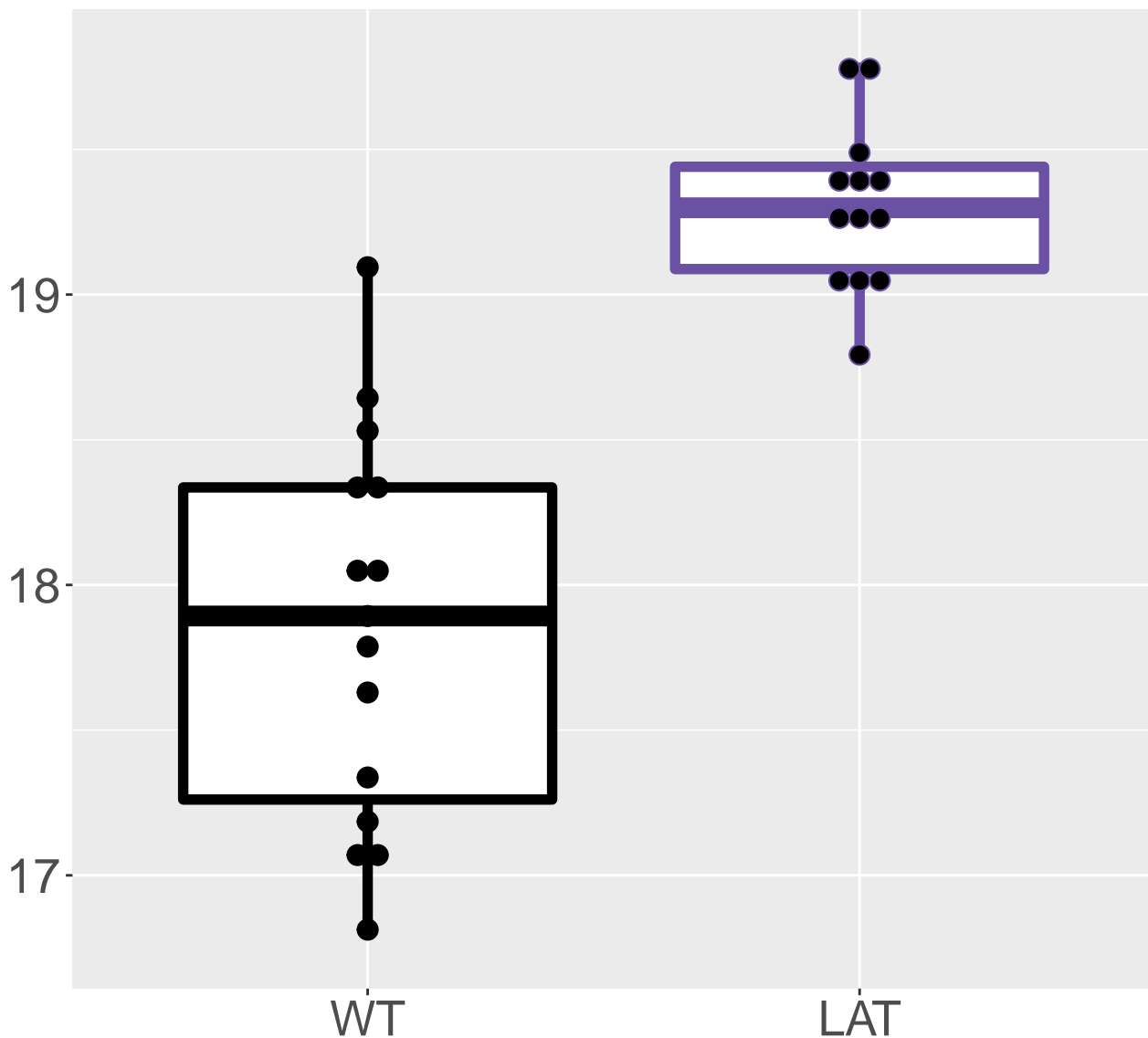
**M803.2355T307.8**

**FDR =  $4.8e-07$ , FC = 2, sex\*\***



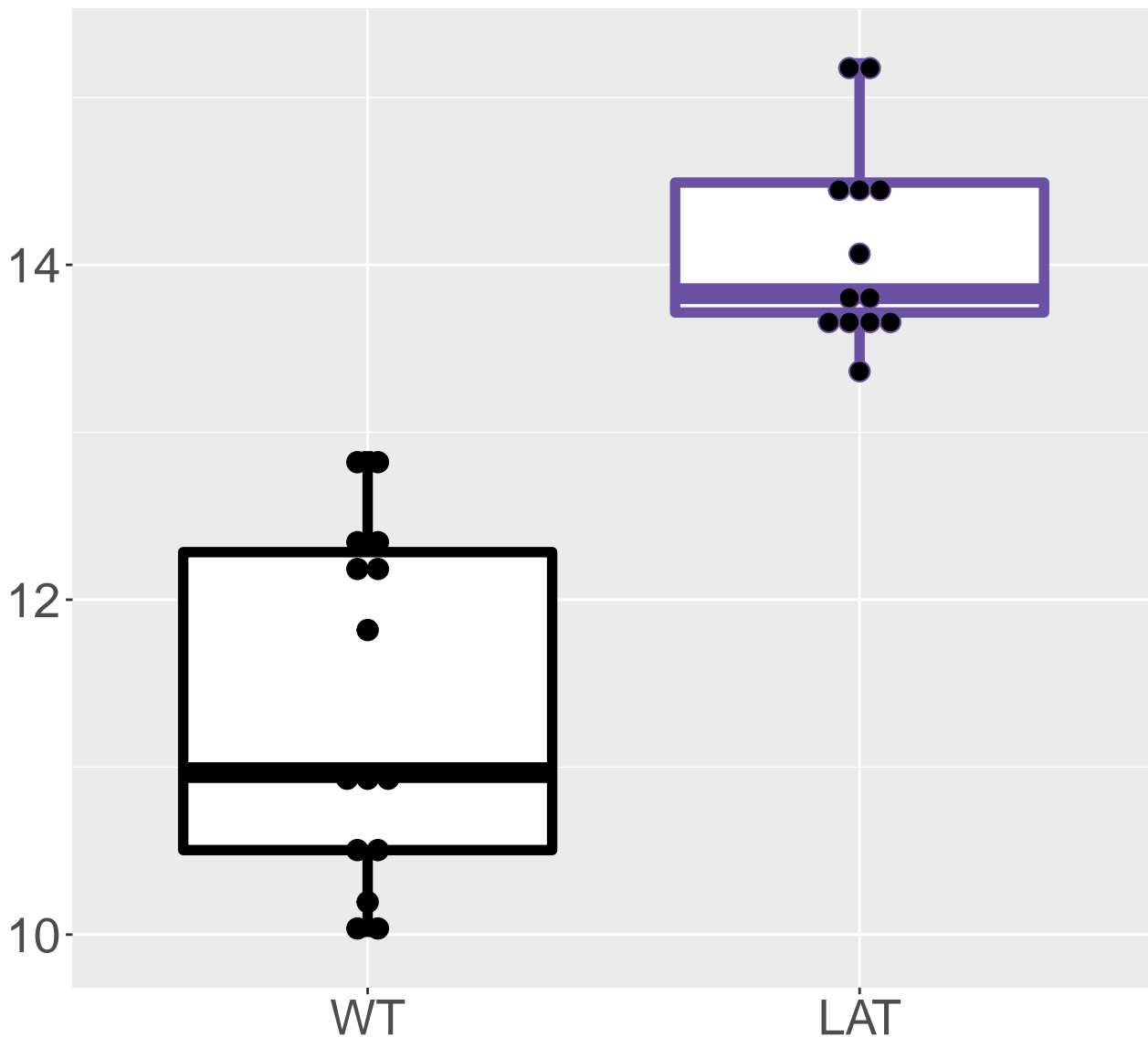
**M920.3136T302.41**

**FDR = 5e-07, FC = 1.4, sex\*\***



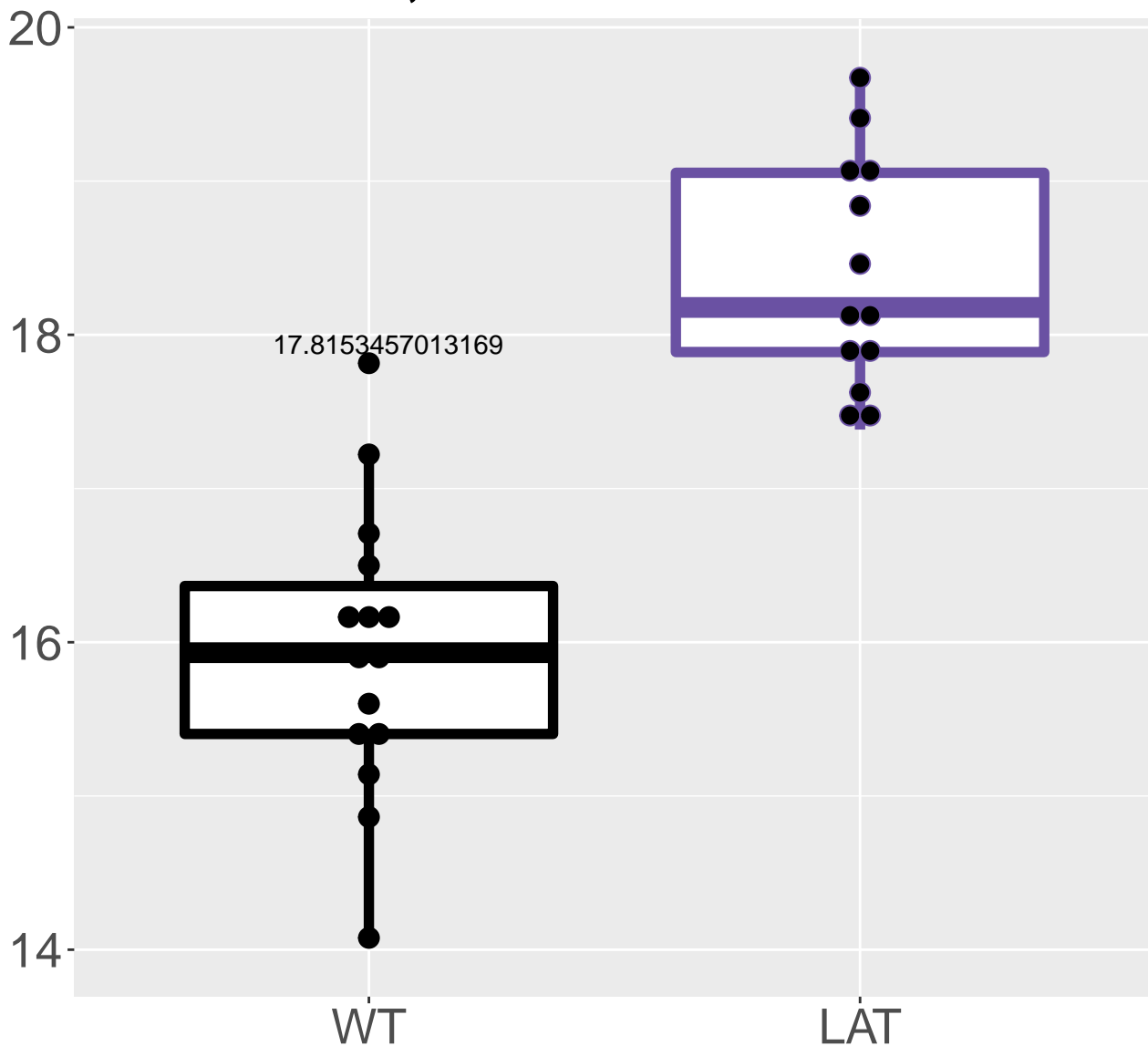
**M533.1743T655.98**

**FDR =  $6.7\text{e-}07$ , FC = 2.7**



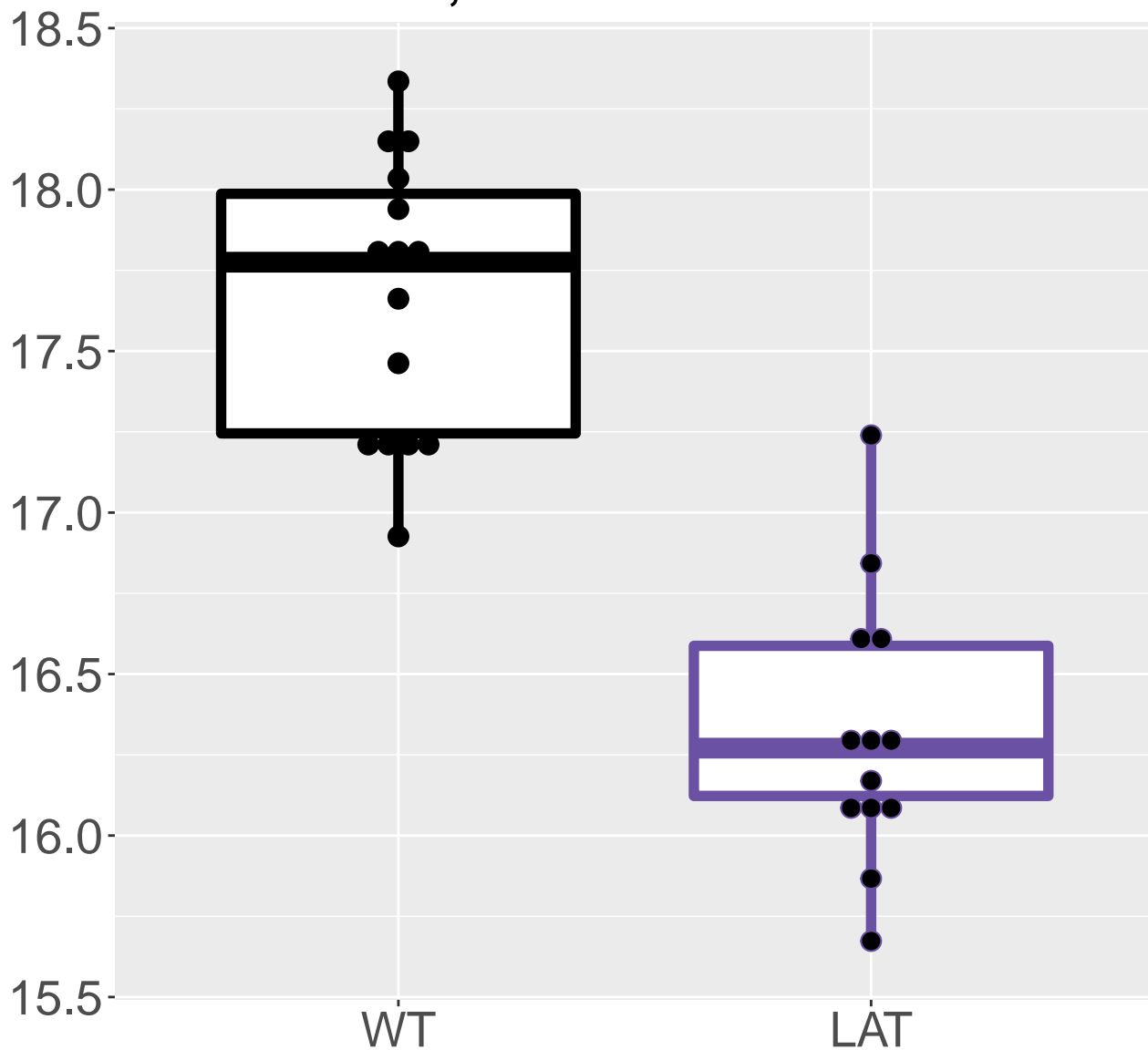
**M618.0859T539.49**

**FDR =  $7.9\text{e-}07$ , FC = 2.5**



**M560.1837T560.23**

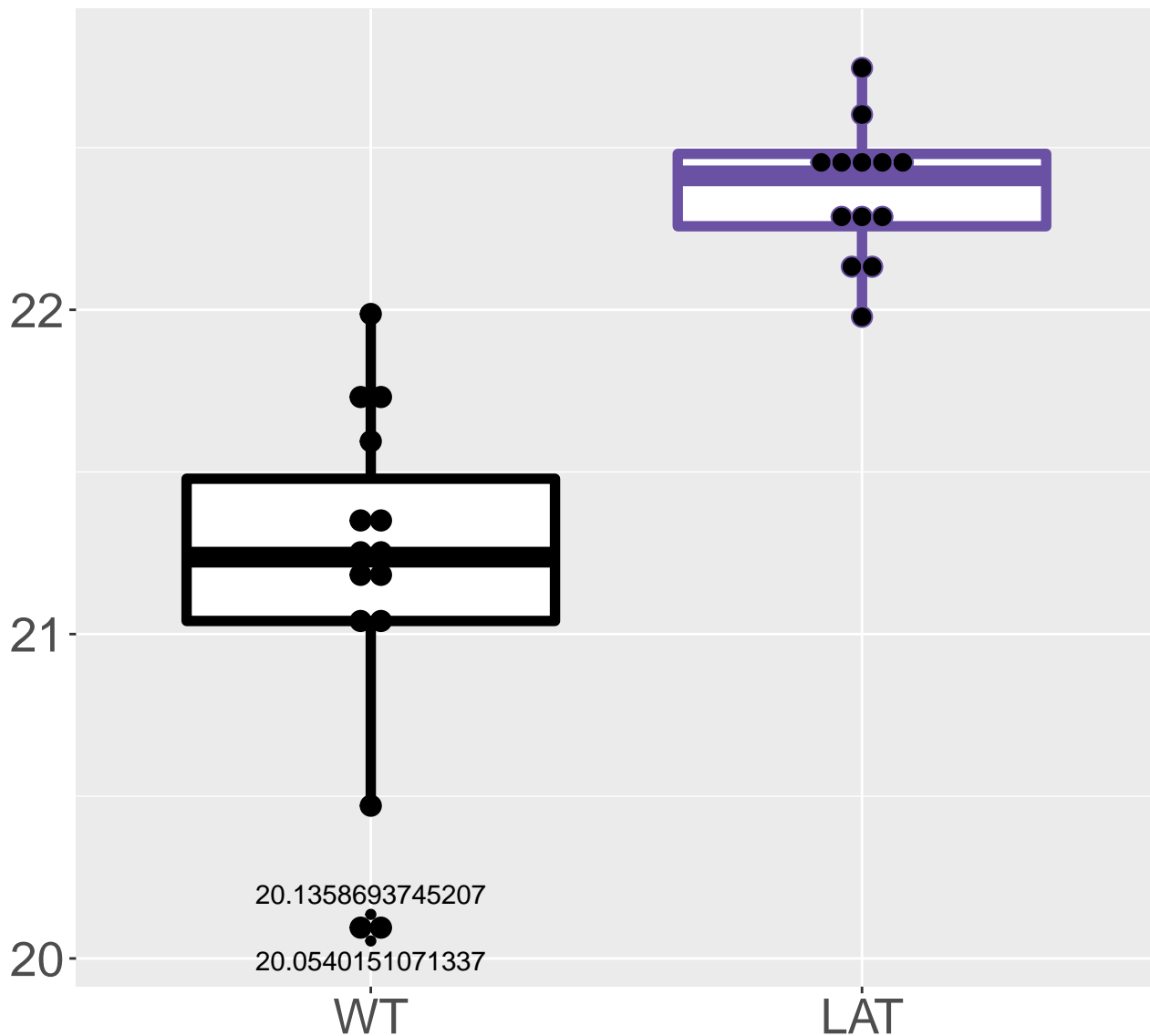
**FDR = 1.9e-06, FC = -1.3**





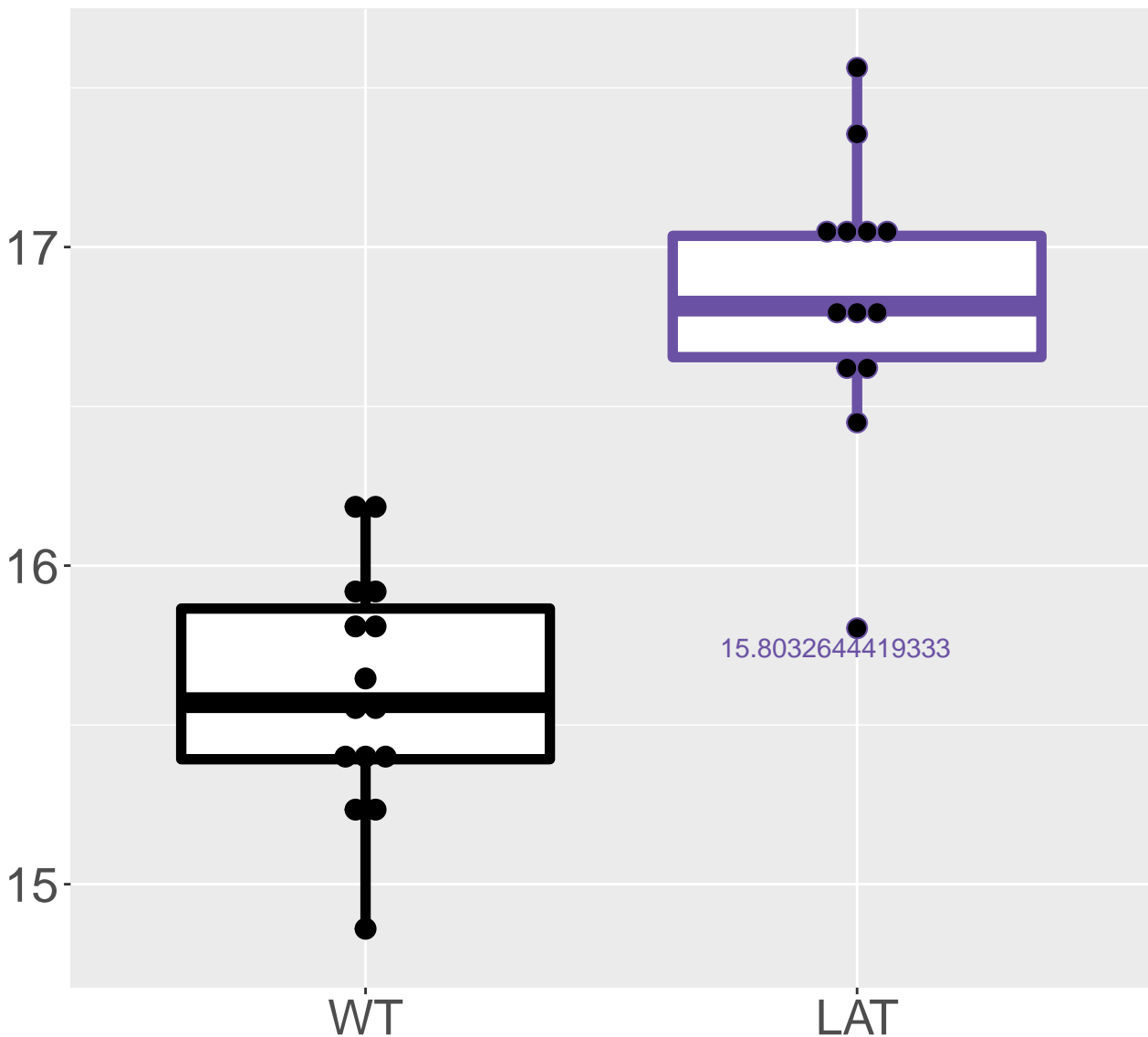
# Uridine 5'-diphospho-N-acetylglucosamine;Ur

FDR = 2.1e-06, FC = 1.2



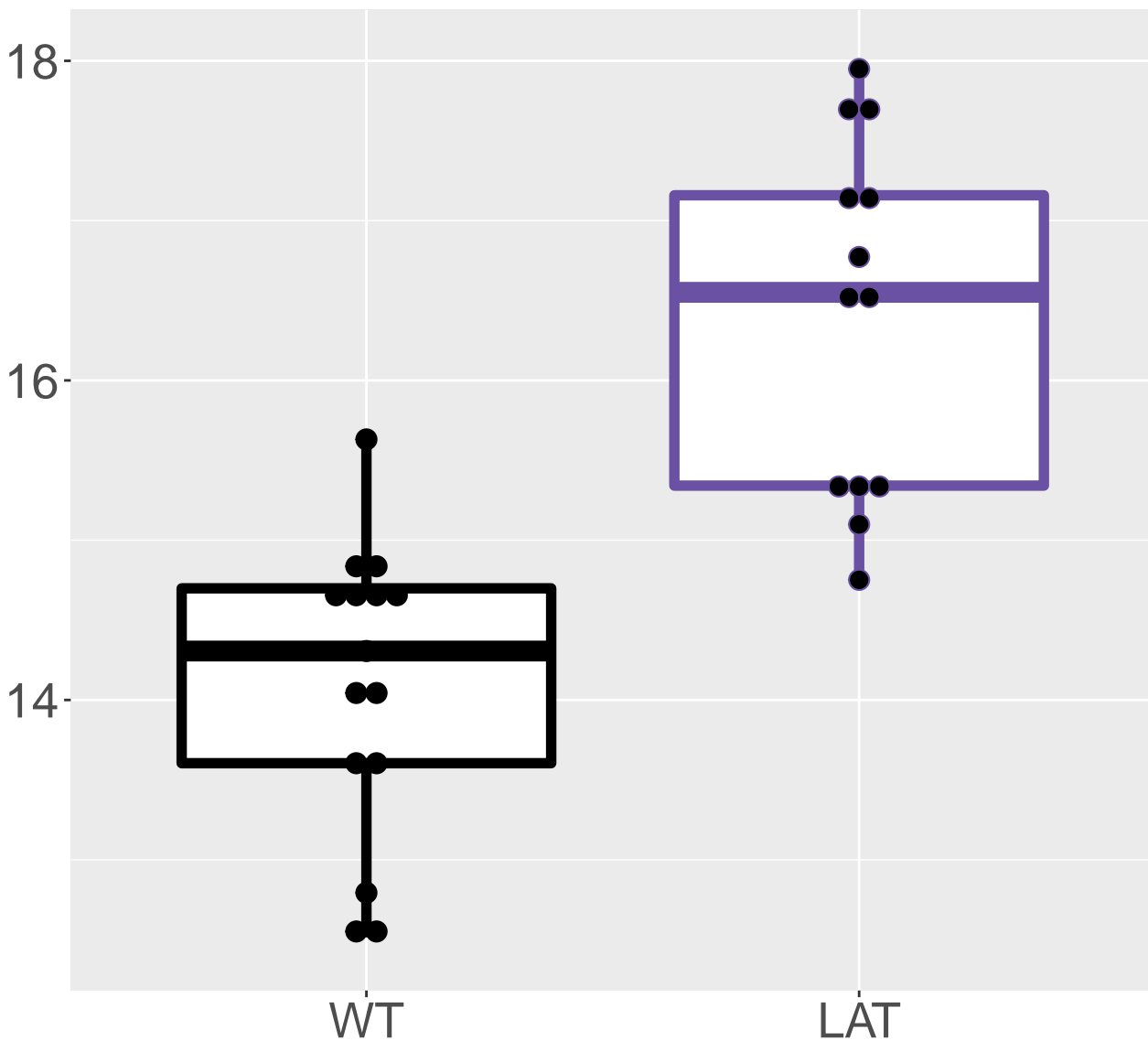
**M348.5228T620.4**

**FDR = 2.4e-06, FC = 1.2**



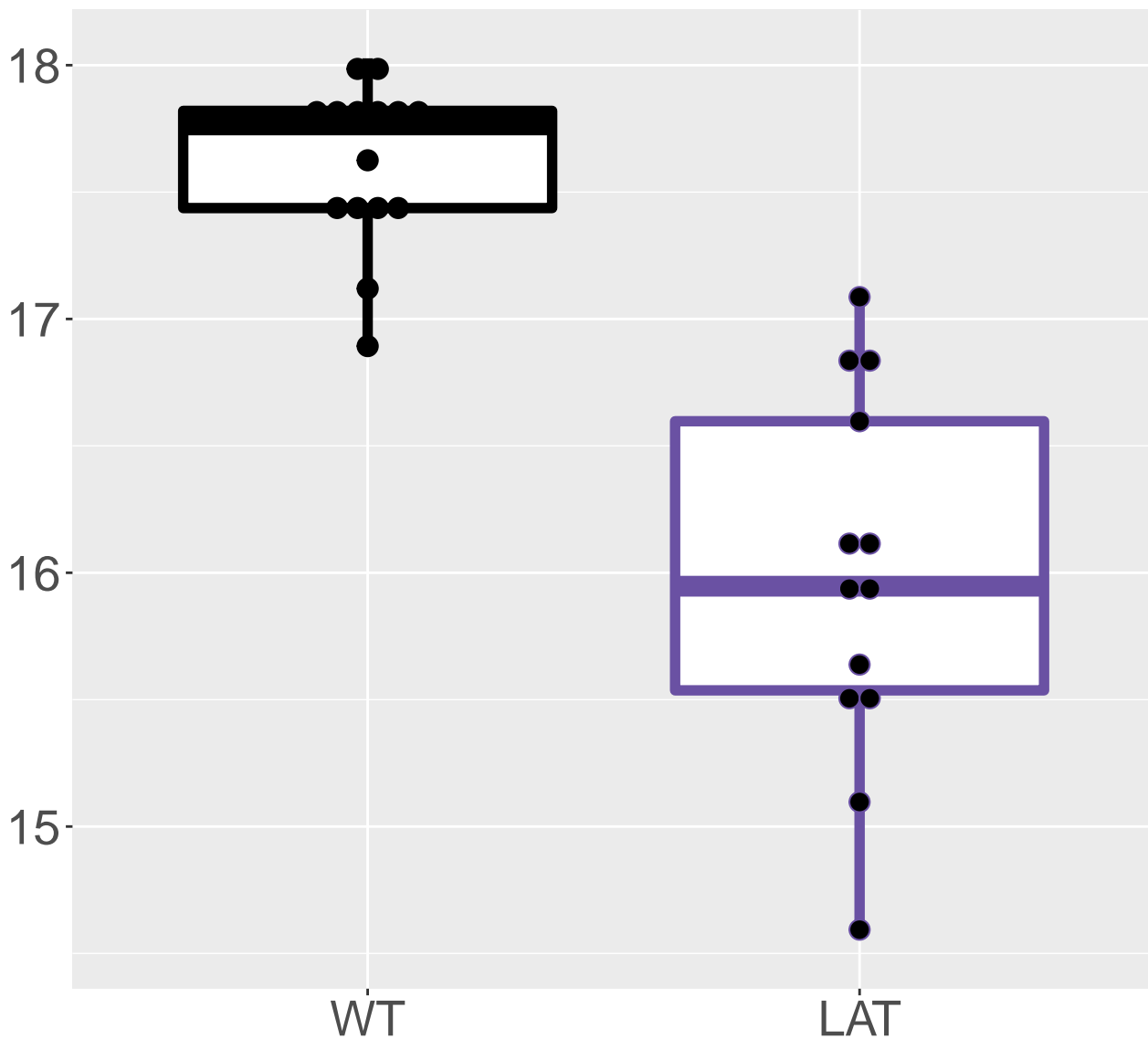
**M765.1981T578.2**

**FDR =  $2.4e-06$ , FC = 2.3, sex\*\***



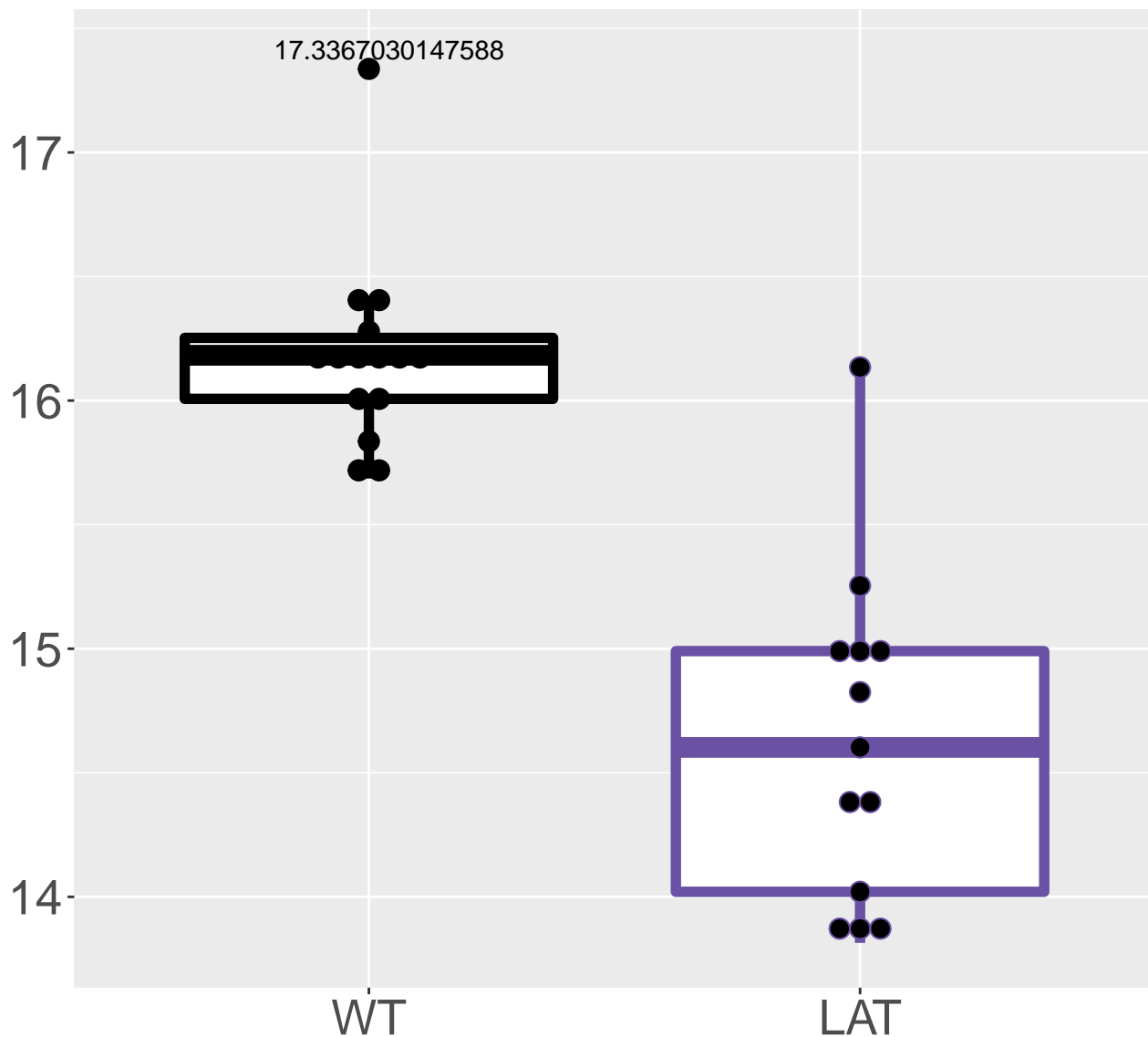
**M253.0933T430.19**

**FDR =  $3.1\text{e-}06$ , FC =  $-1.6$**



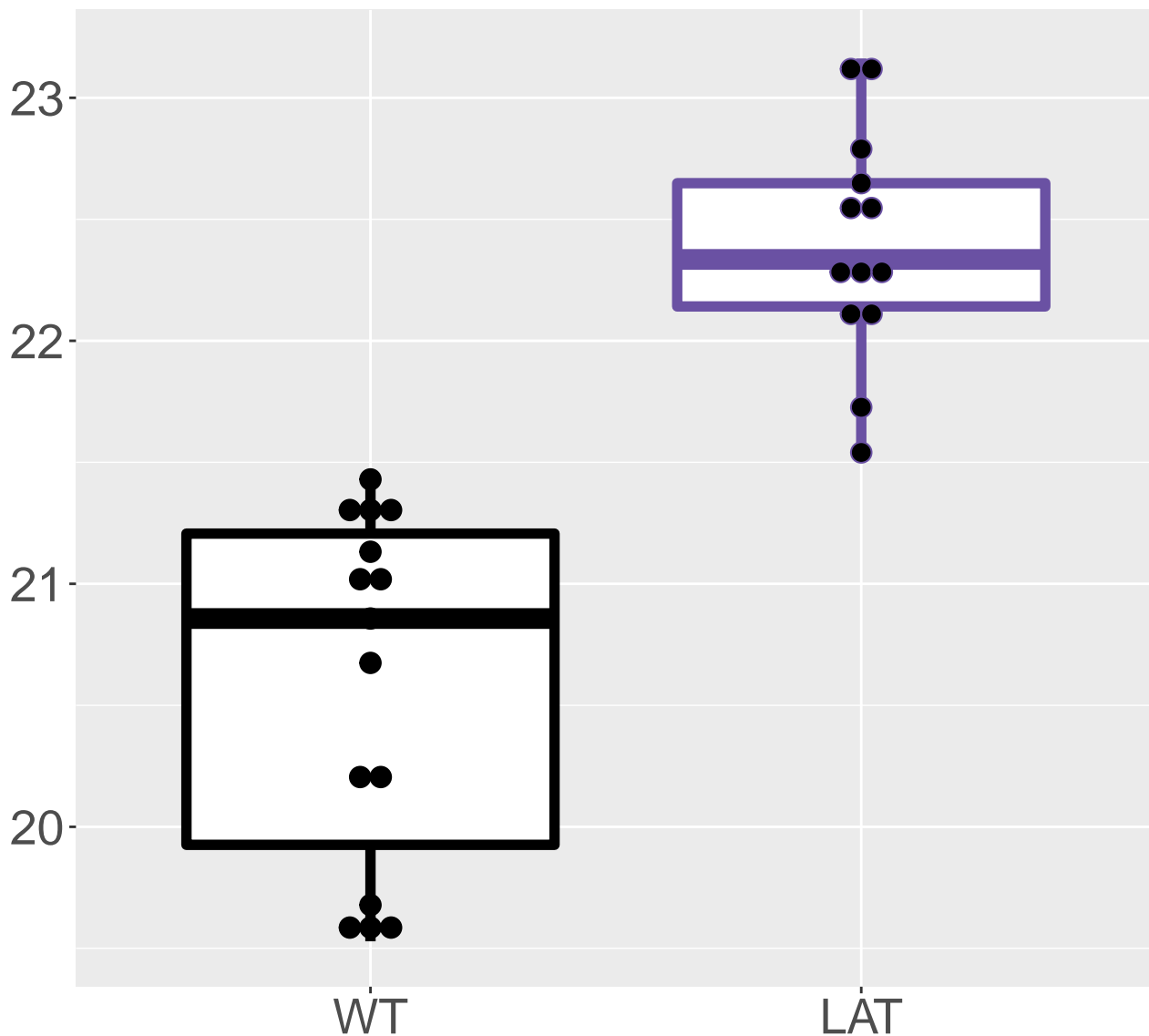
**M617.2418T621.92**

**FDR =  $3.1\text{e-}06$ , FC =  $-1.6$**



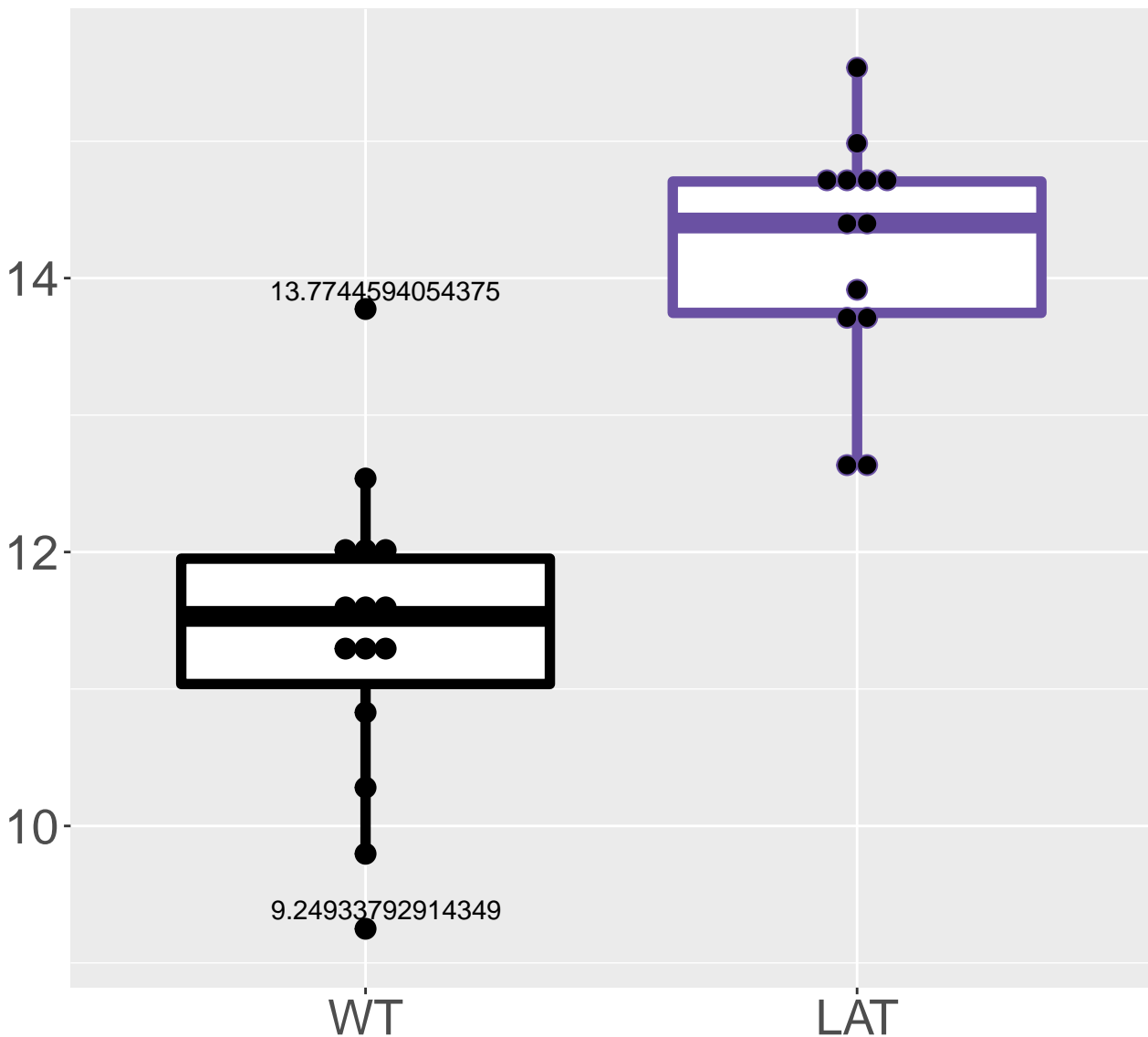
**M110.9854T515.29**

**FDR =  $3.3\text{e-}06$ , FC = 1.8**

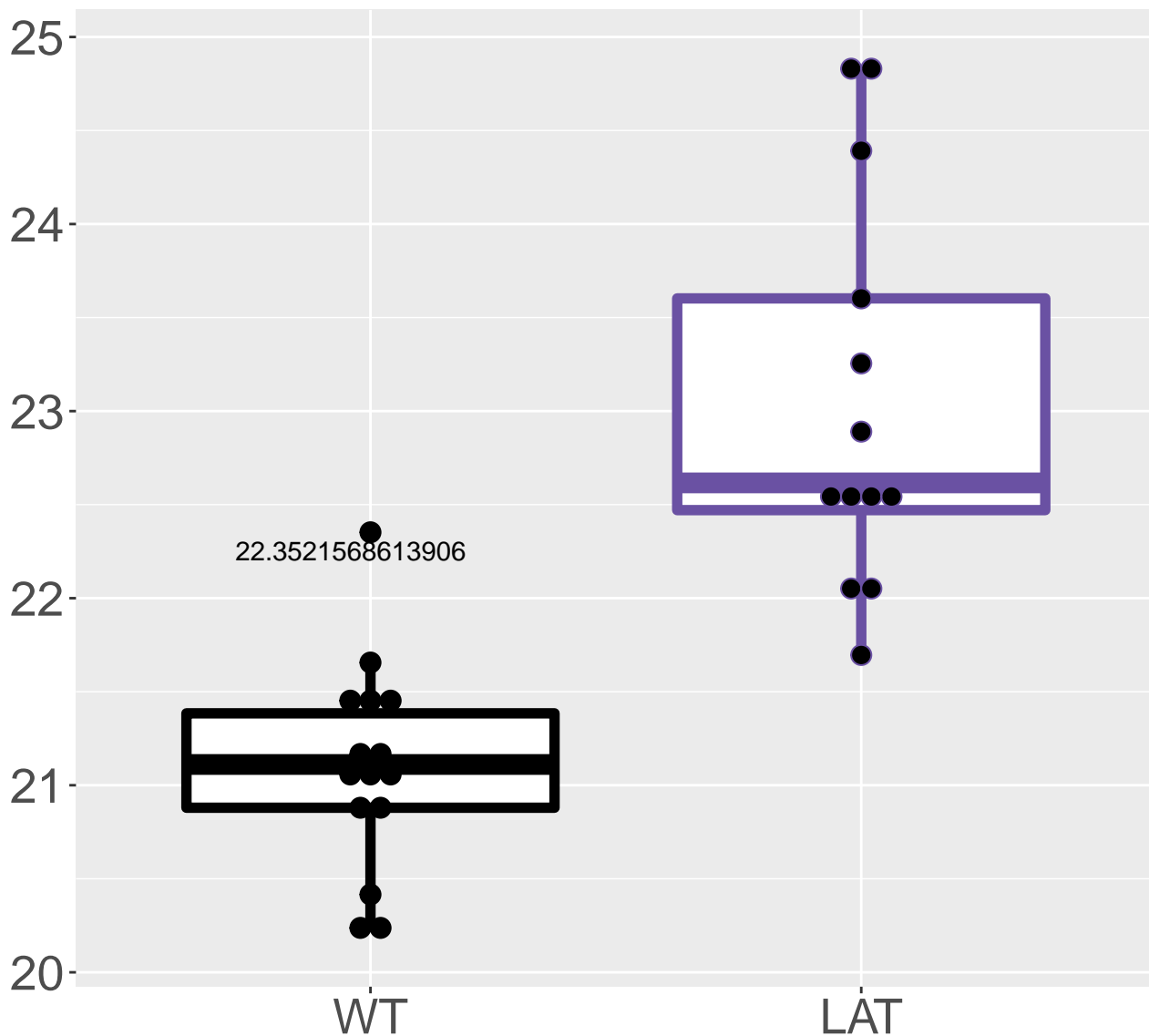


Uridine 5'-diphosphate-glucuronic acid;UDP-Î

FDR = 3.3e-06, FC = 2.8



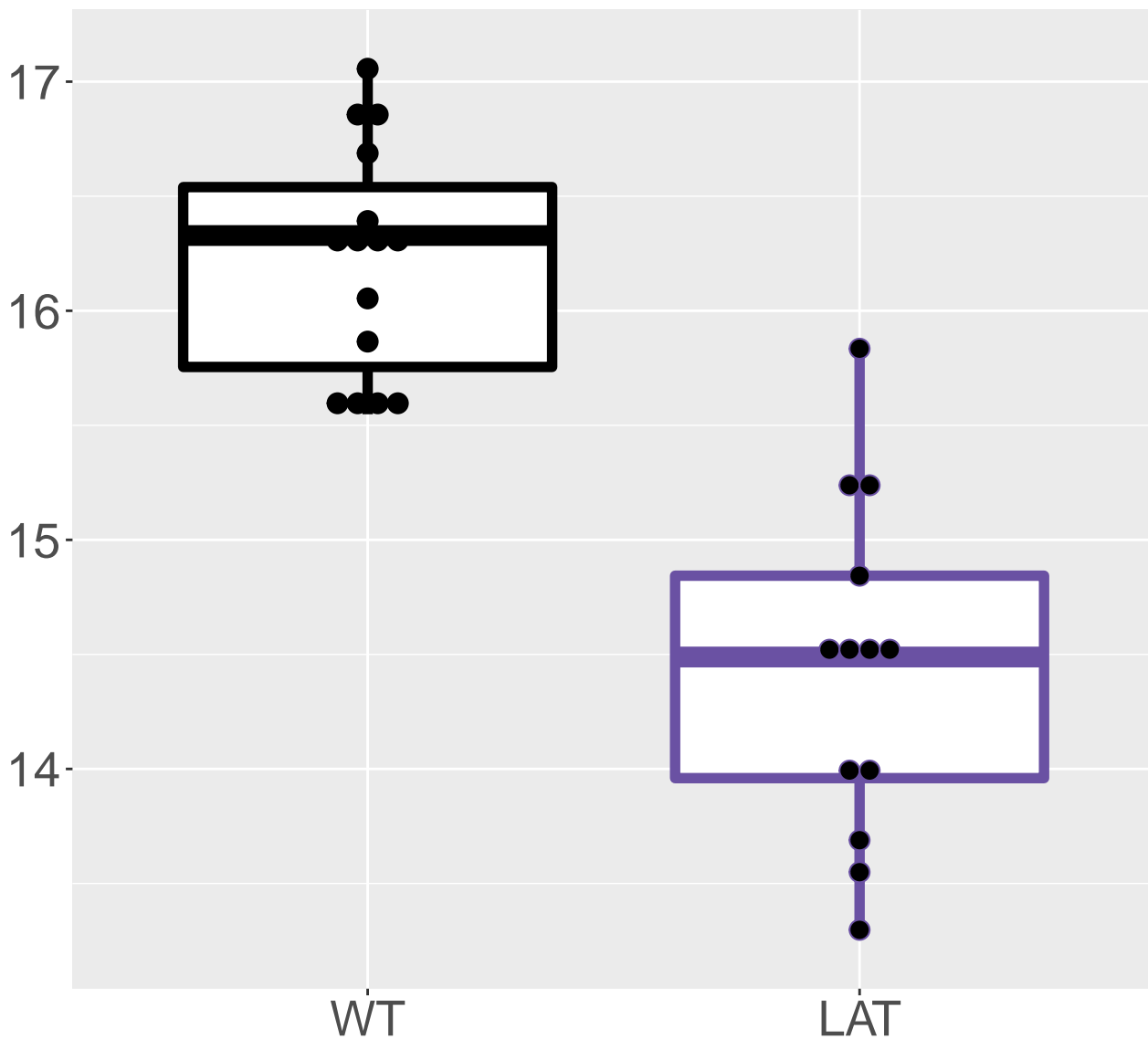
5'-AMP;5'-Adenosine monophosphate;Adenosine  
FDR = 4e-06, FC = 2, sex\*\*





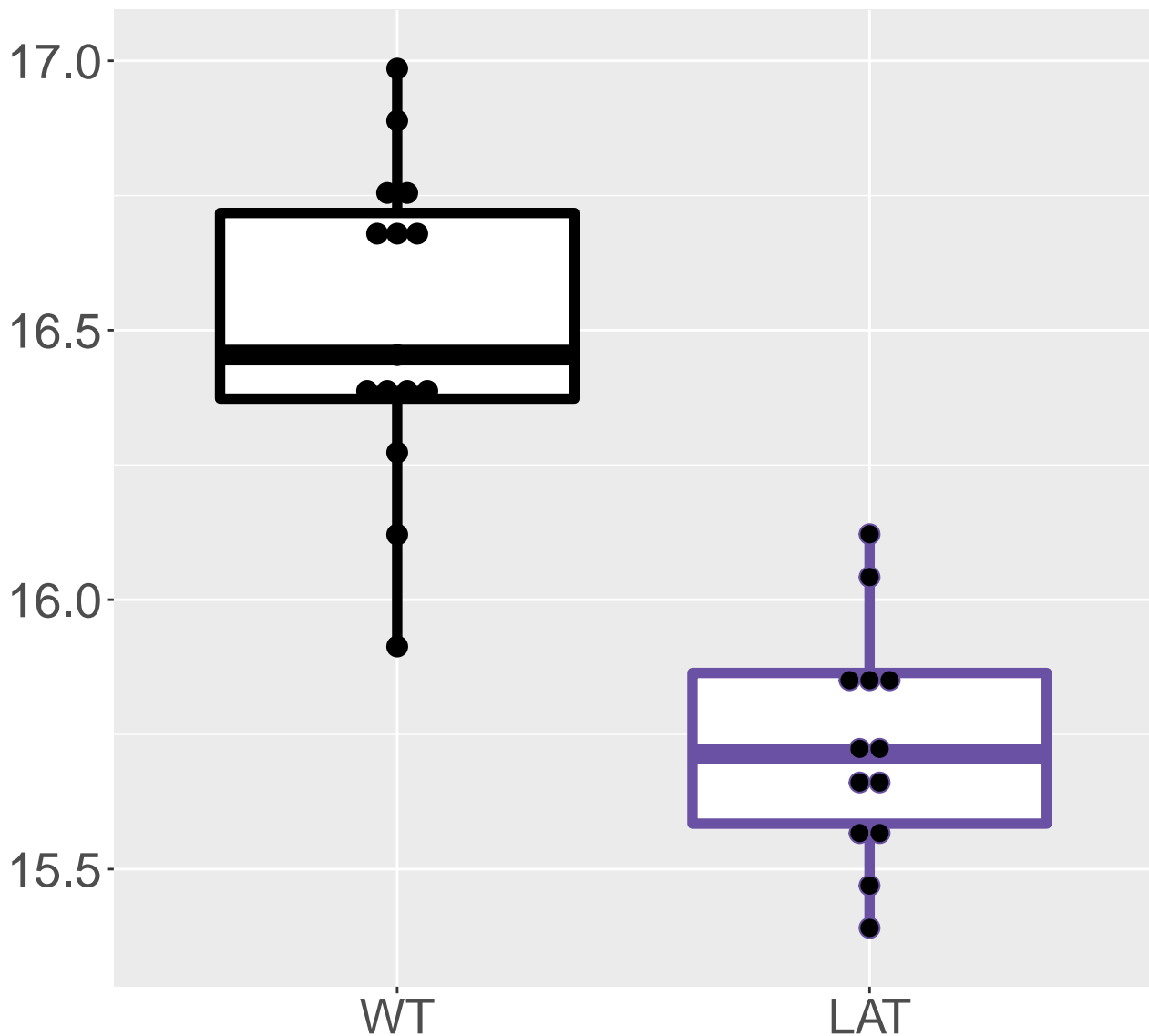
**M279.5883T559.83**

**FDR =  $4.2e-06$ , FC =  $-1.8$**



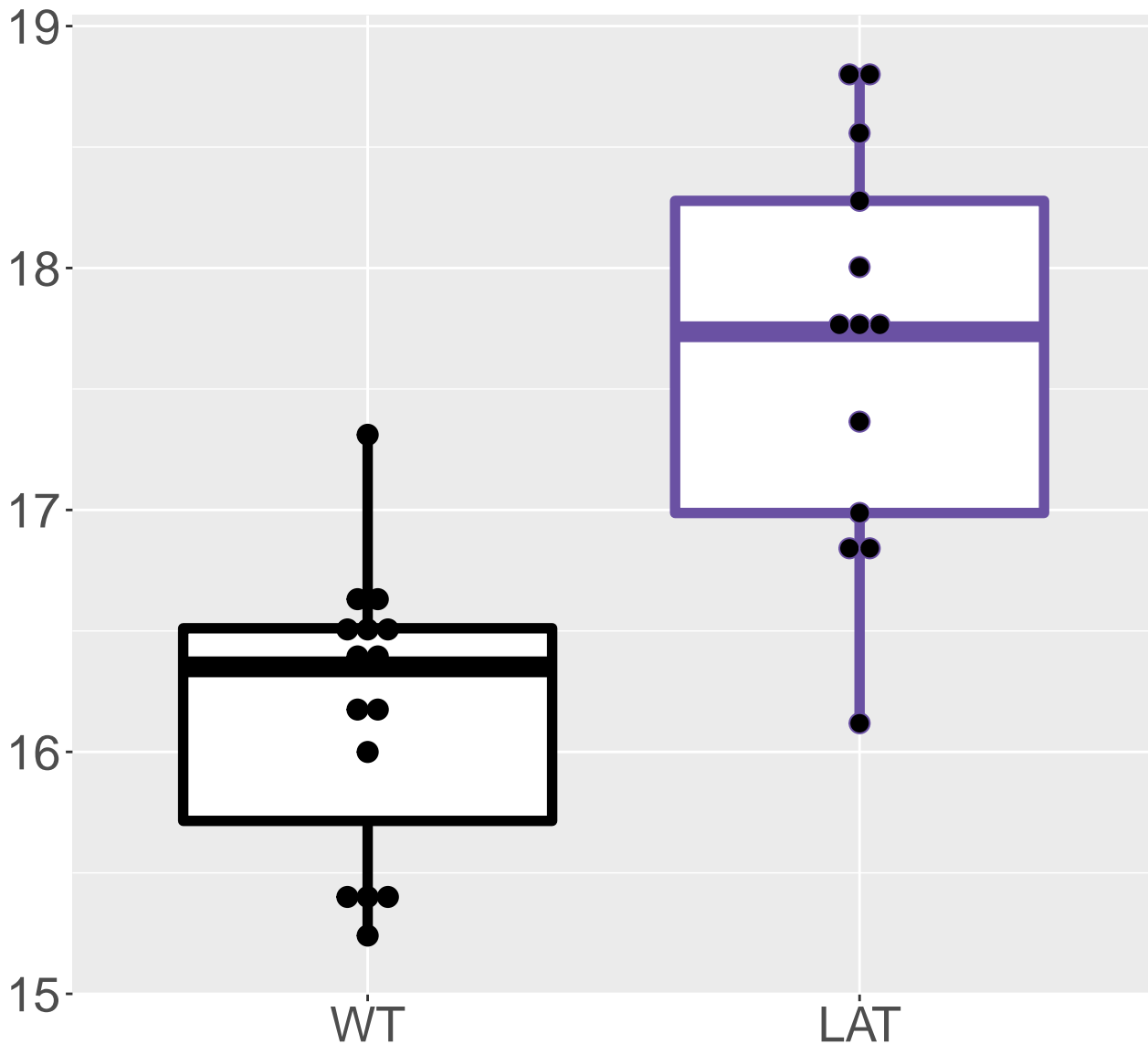
**M876.2553T627.01**

**FDR =  $4.7e-06$ , FC =  $-0.79$**



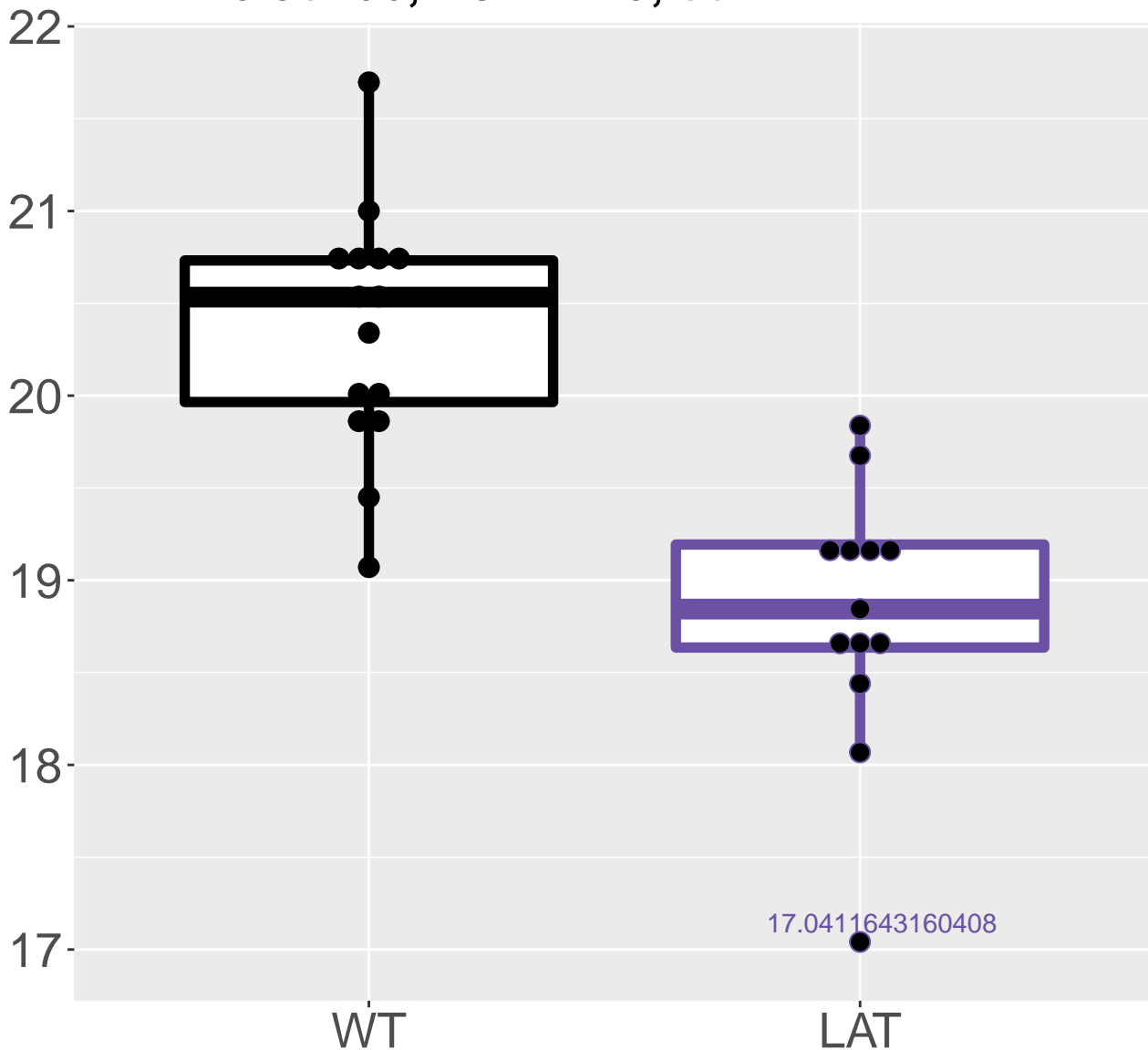
**M356.0159T556**

**FDR = 4.7e-06, FC = 1.5, sex\*\*\***



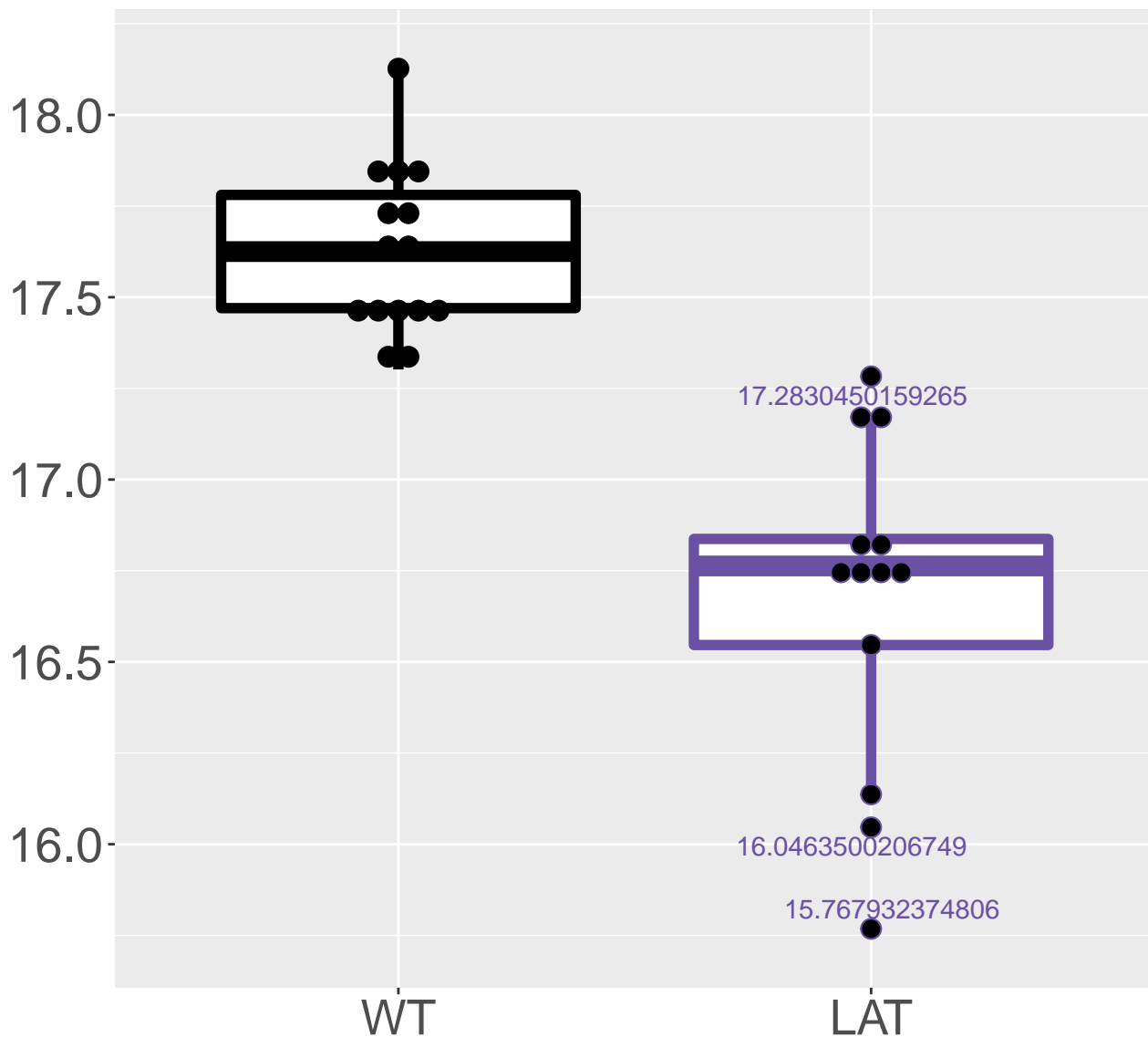
**M401.1571T327.68**

**FDR = 5.9e-06, FC = -1.5, sex\*\***



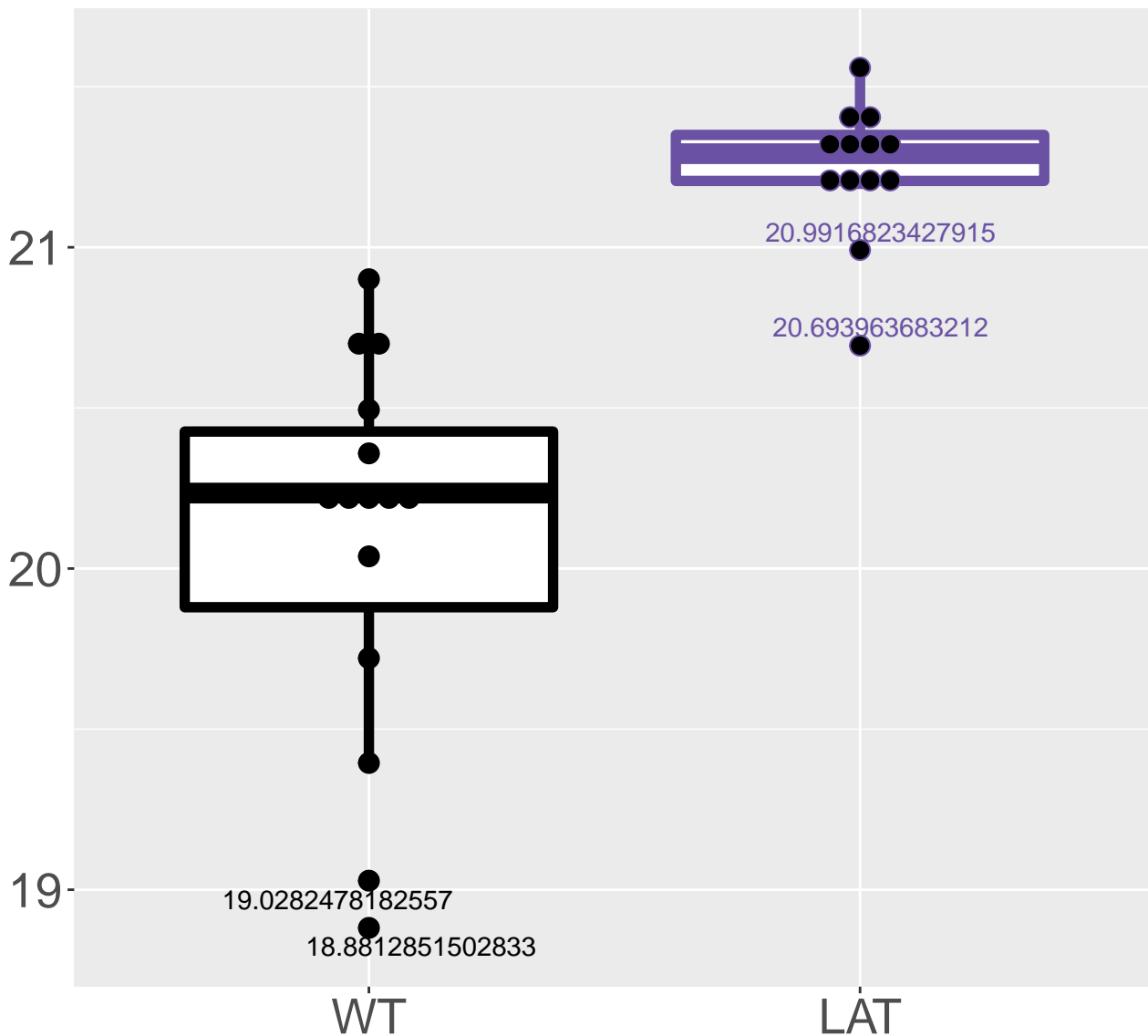
**M649.2679T589.37**

**FDR =  $5.9\text{e-}06$ , FC =  $-0.95$**



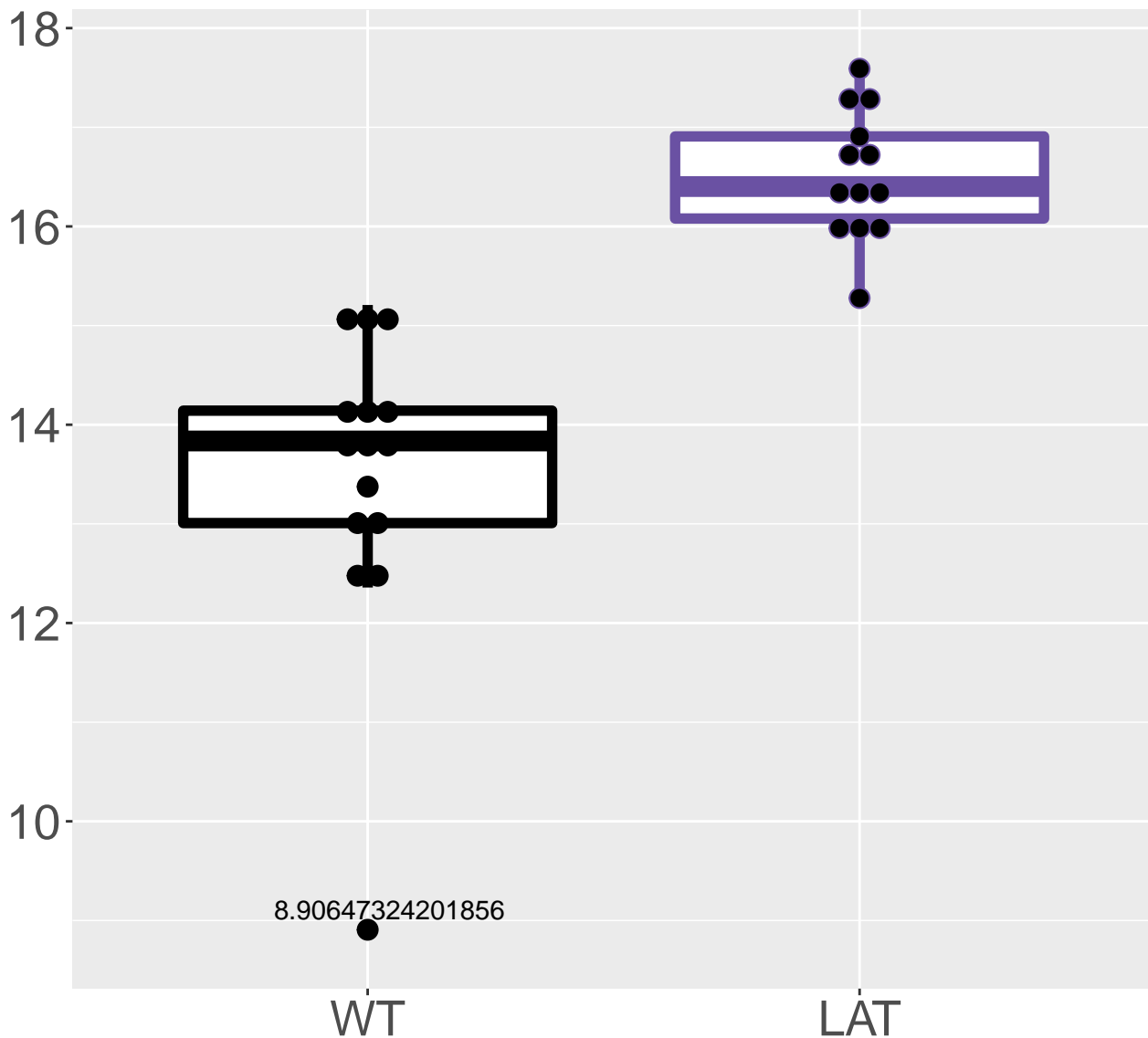
**M302.5339T556.1\_1**

**FDR = 6e-06, FC = 1.2, sex\***



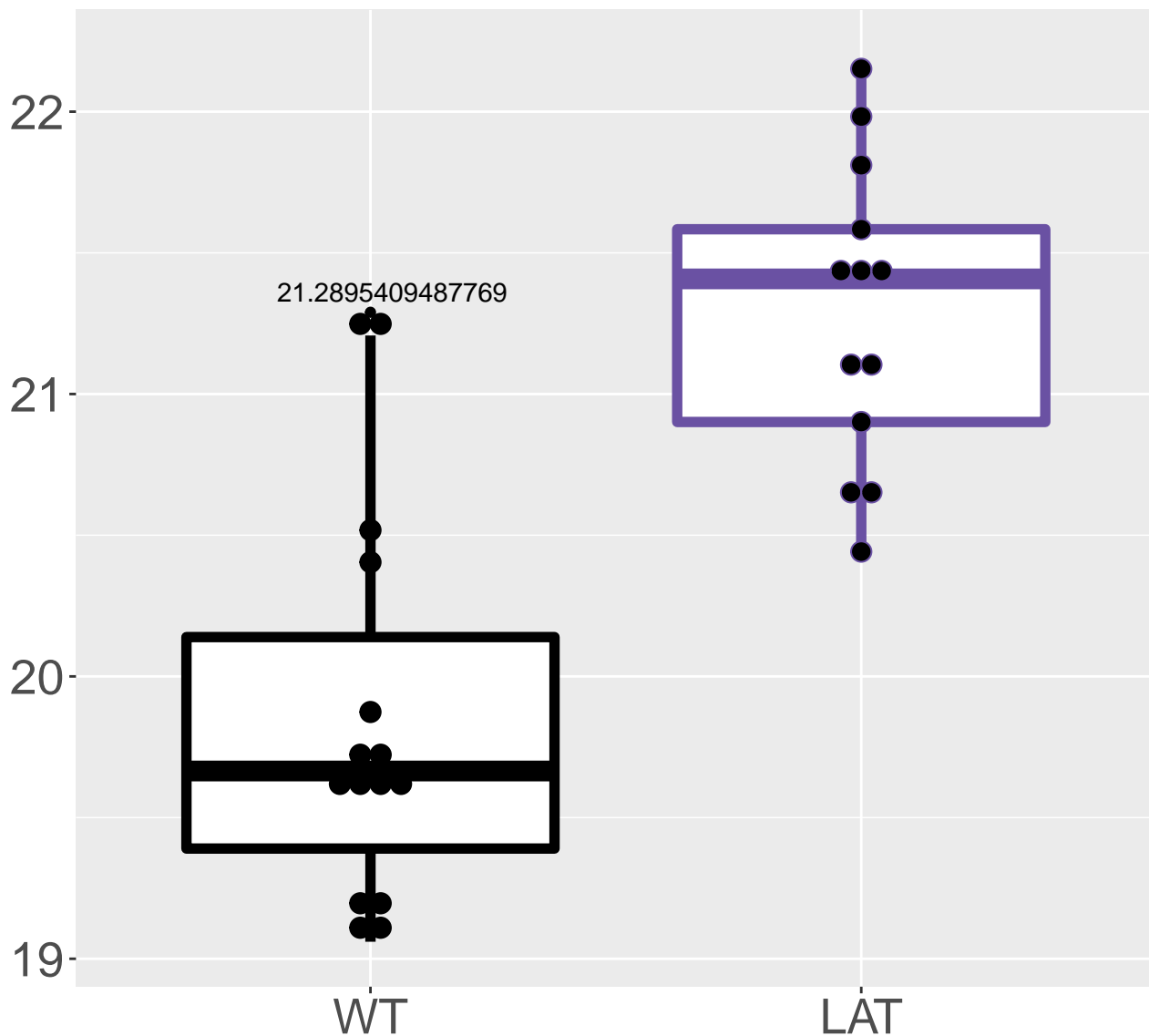
**M404.1321T622.69**

**FDR = 6.4e-06, FC = 3**



# D-Sedoheptulose 7-phosphate;Sedoheptulose

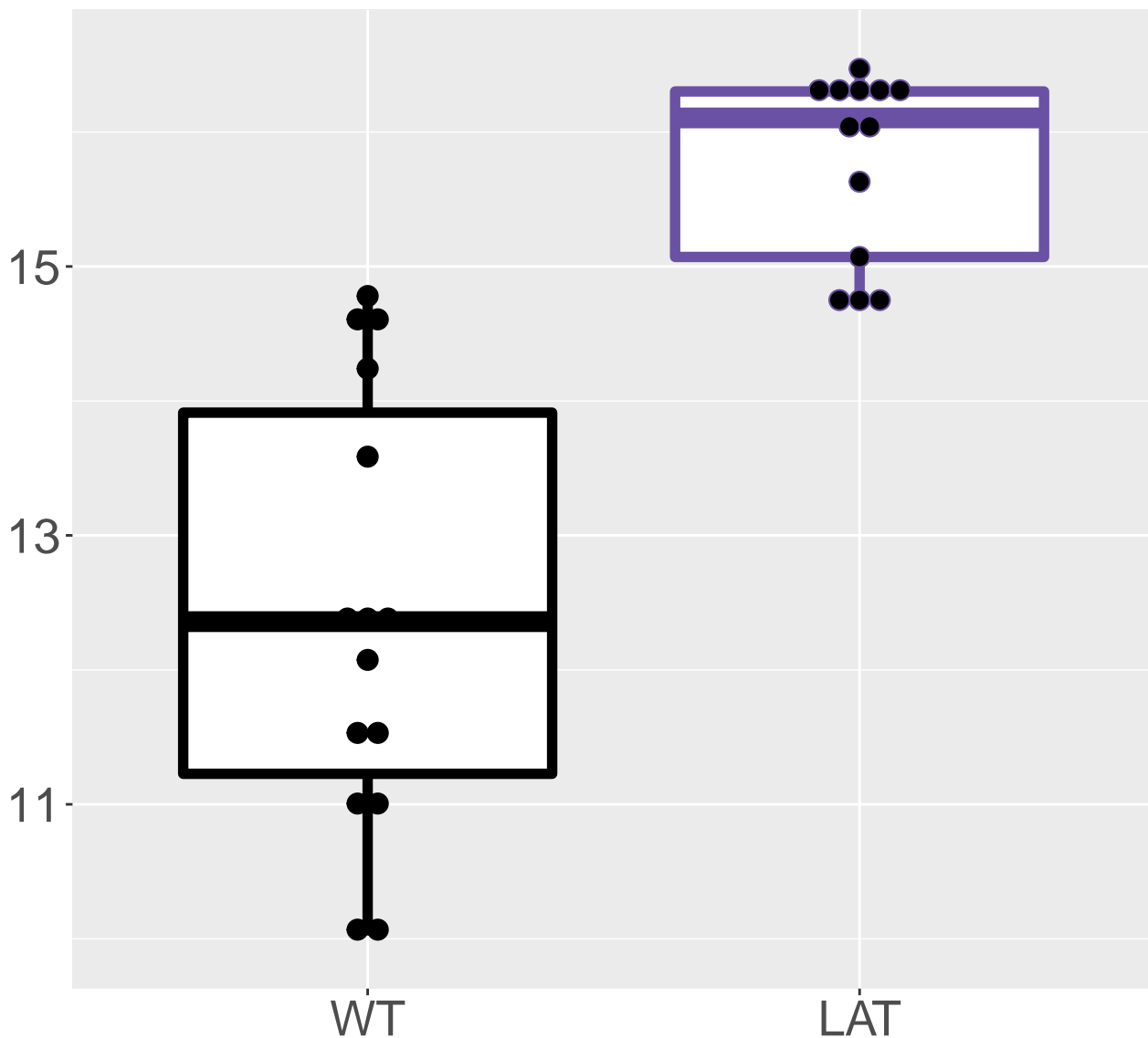
FDR =  $7.4e-06$ , FC = 1.4, sex\*





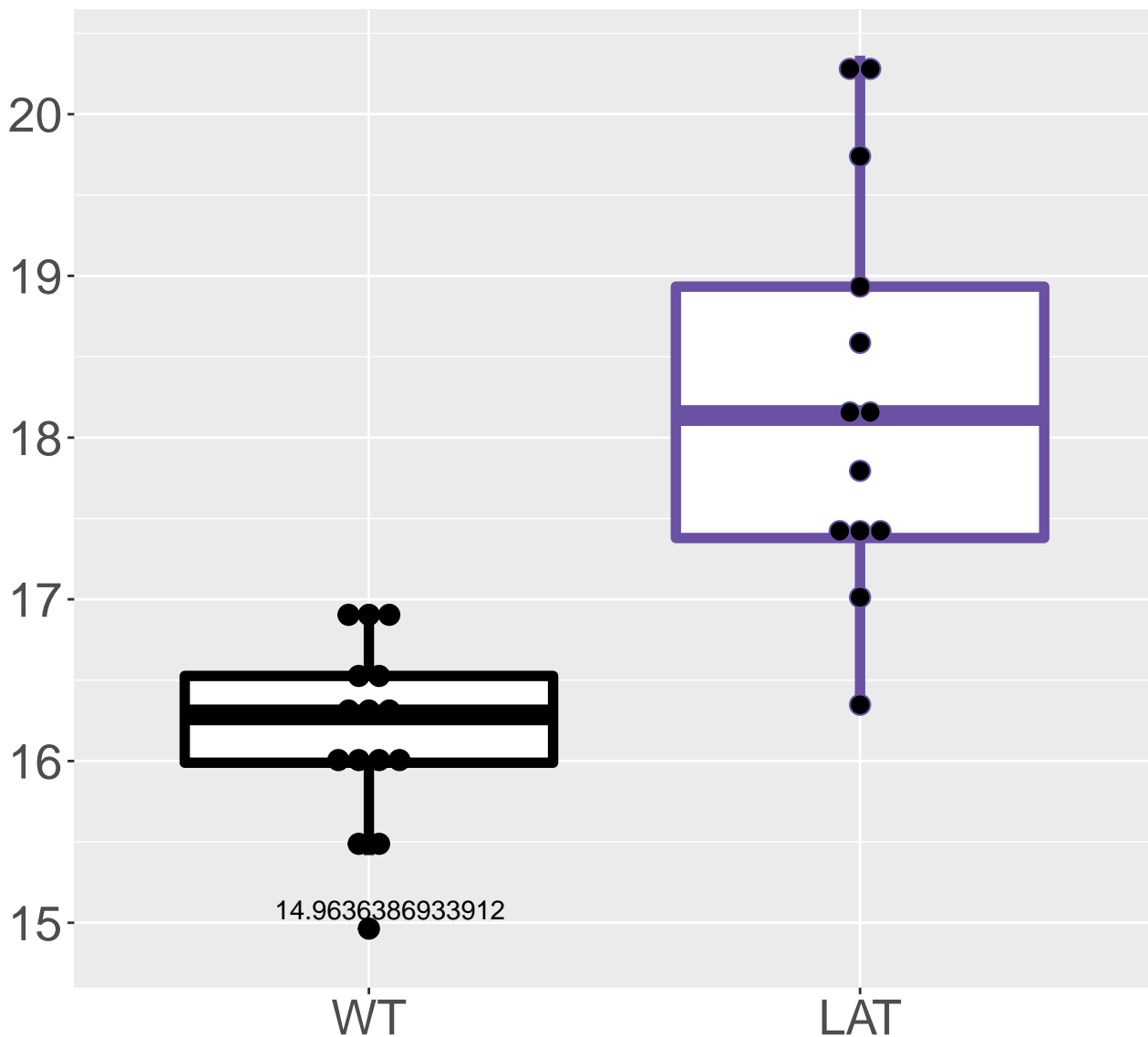
**M615.1551T535.92**

**FDR =  $8e-06$ , FC = 3.4**



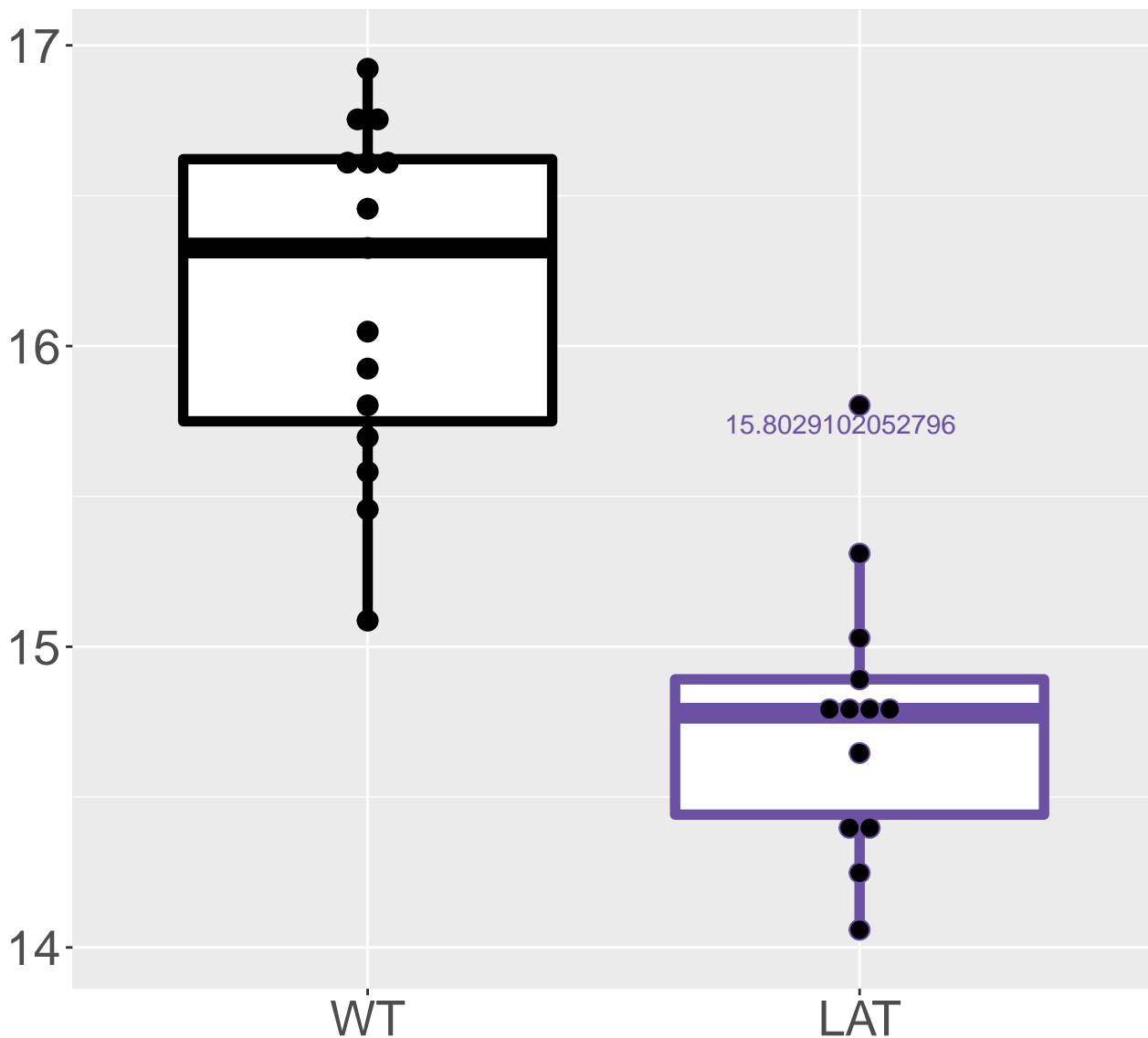
**M527.1232T487.21**

**FDR = 8e-06, FC = 2.1, sex\*\***



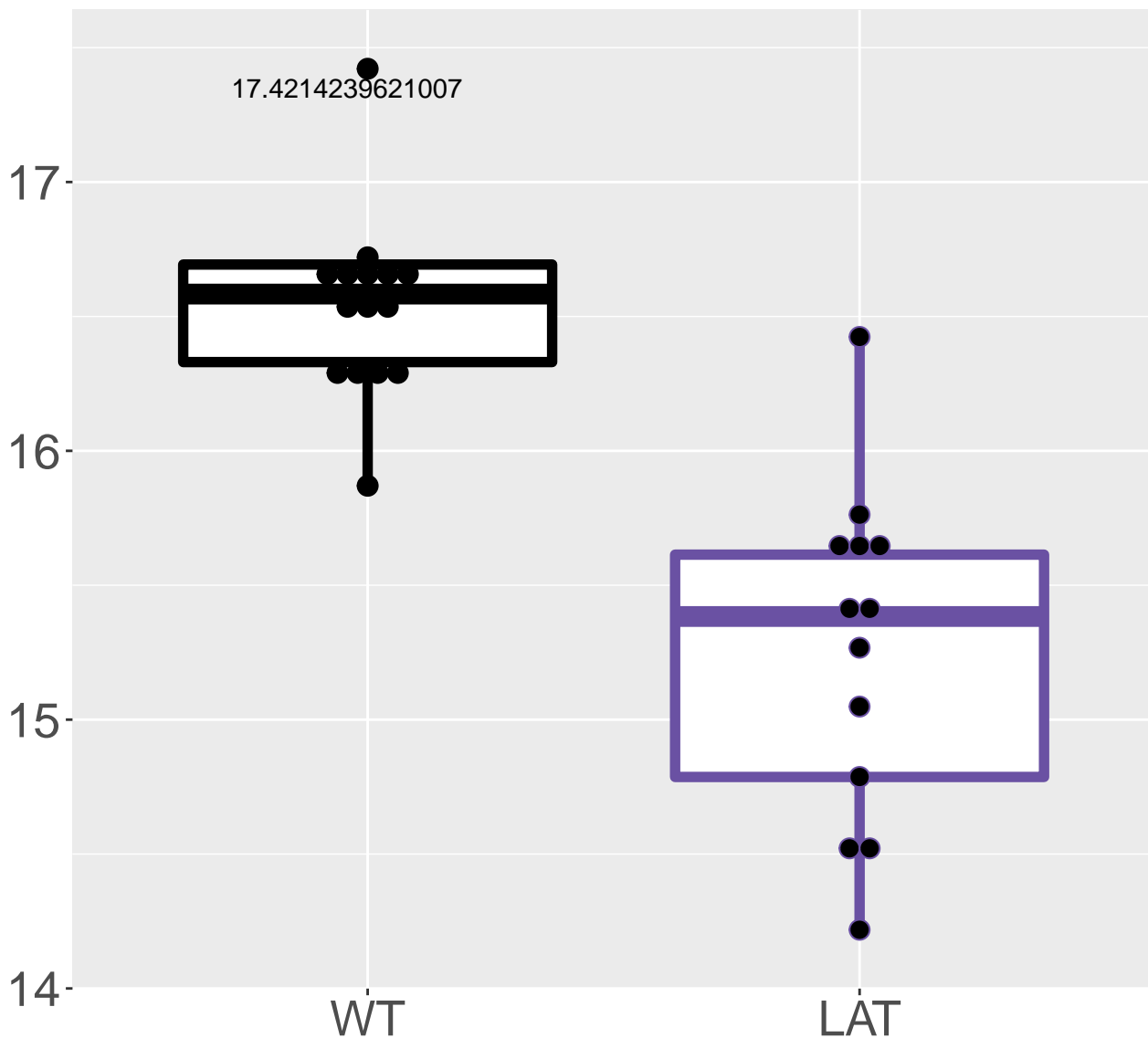
**M859.7725T626.86**

**FDR = 8e-06, FC = -1.4**

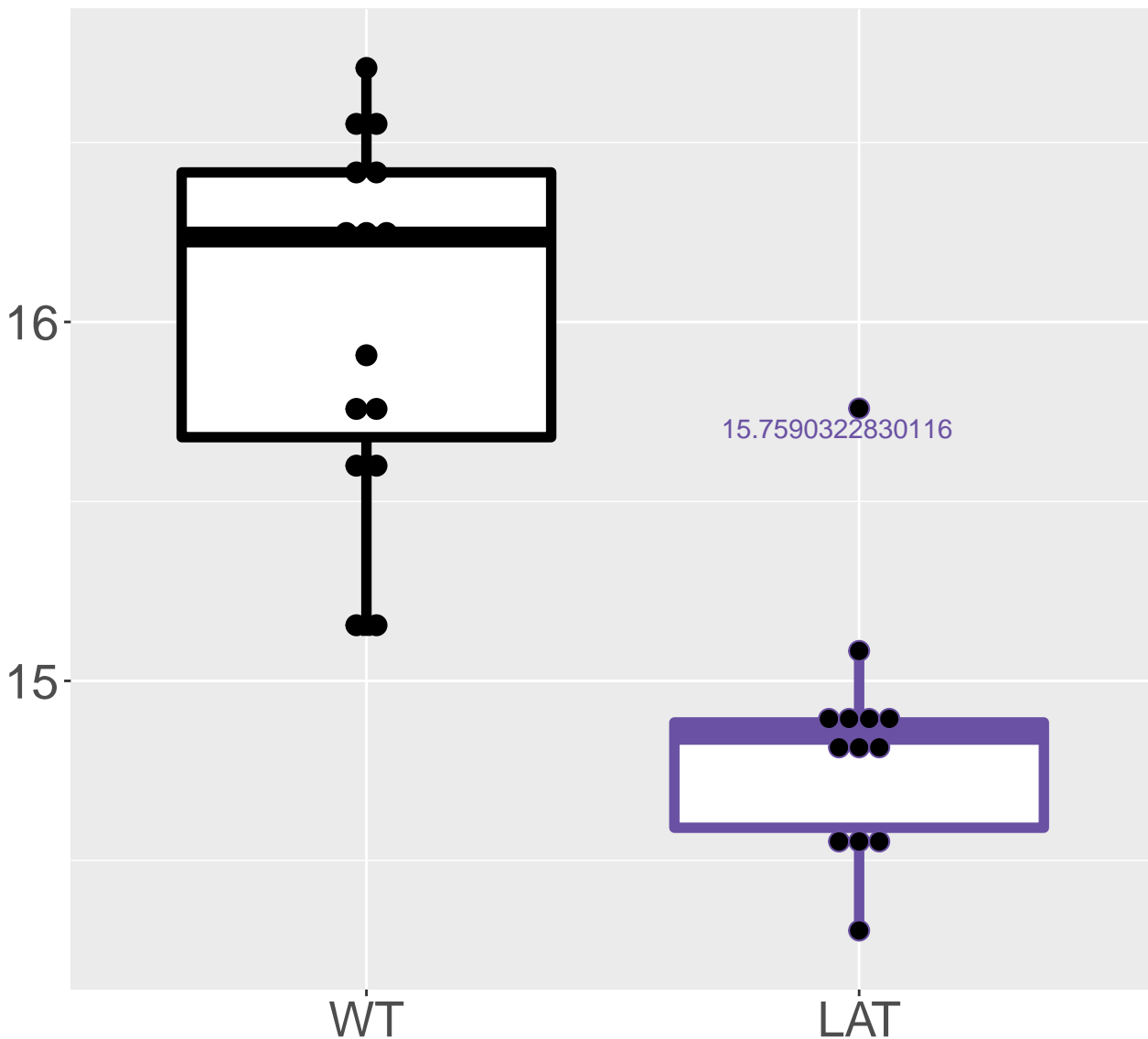


**M631.2581T620.75**

**FDR = 8e-06, FC = -1.3**

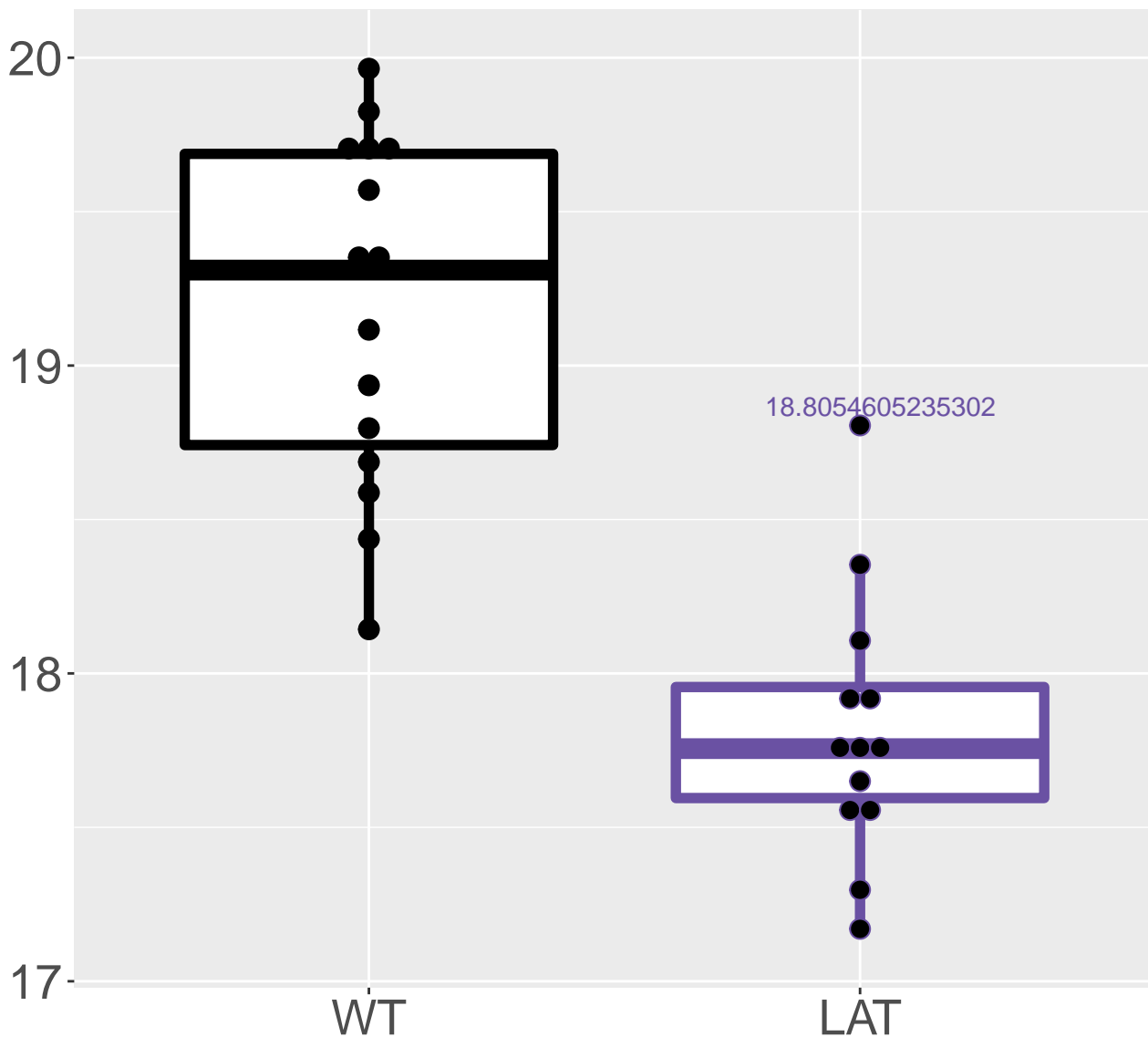


**M414.6351T625.82**  
**FDR = 8e-06, FC = -1.2**



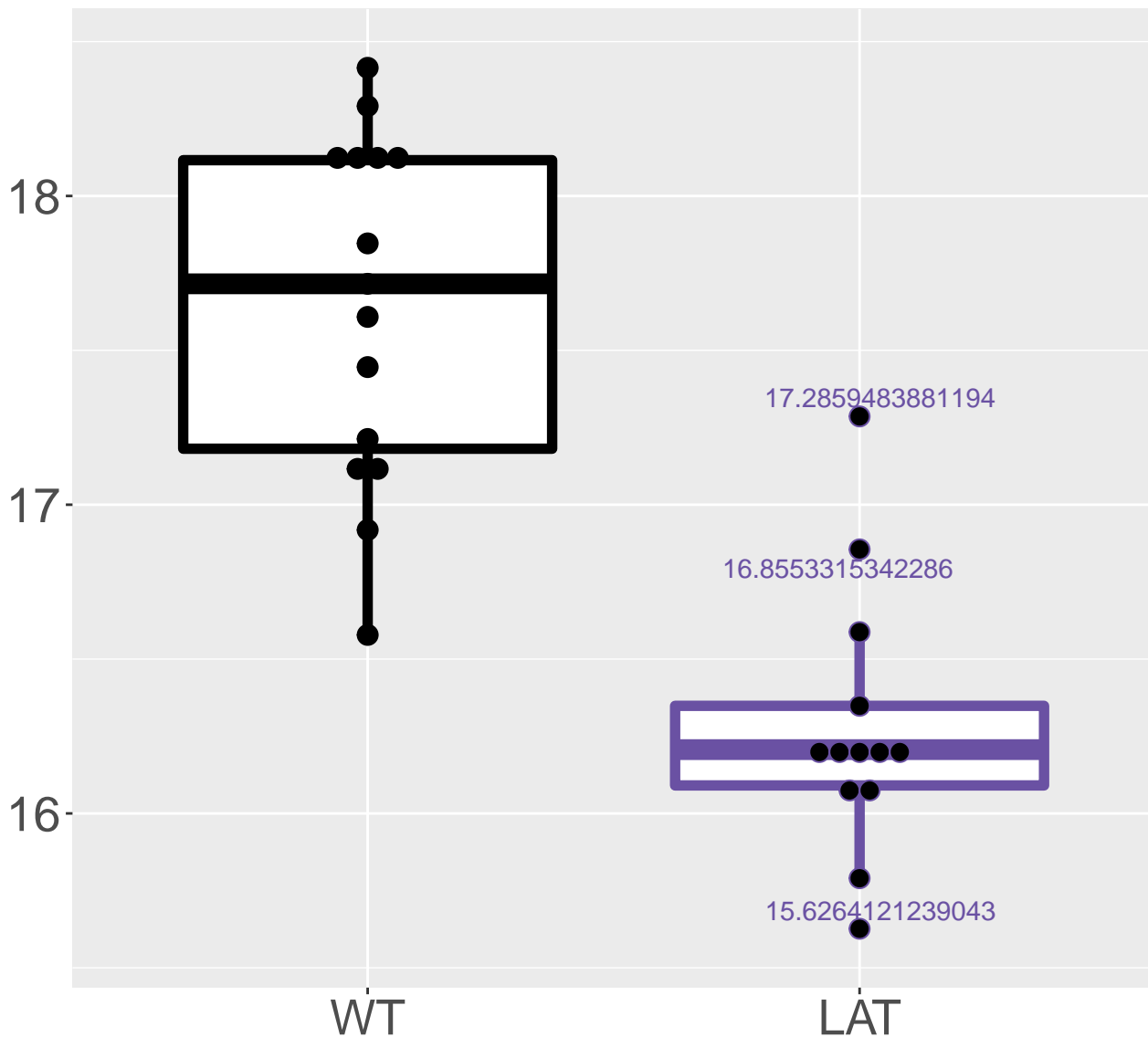
**M858.2681T626.84**

**FDR =  $8.4\text{e-}06$ , FC =  $-1.4$**



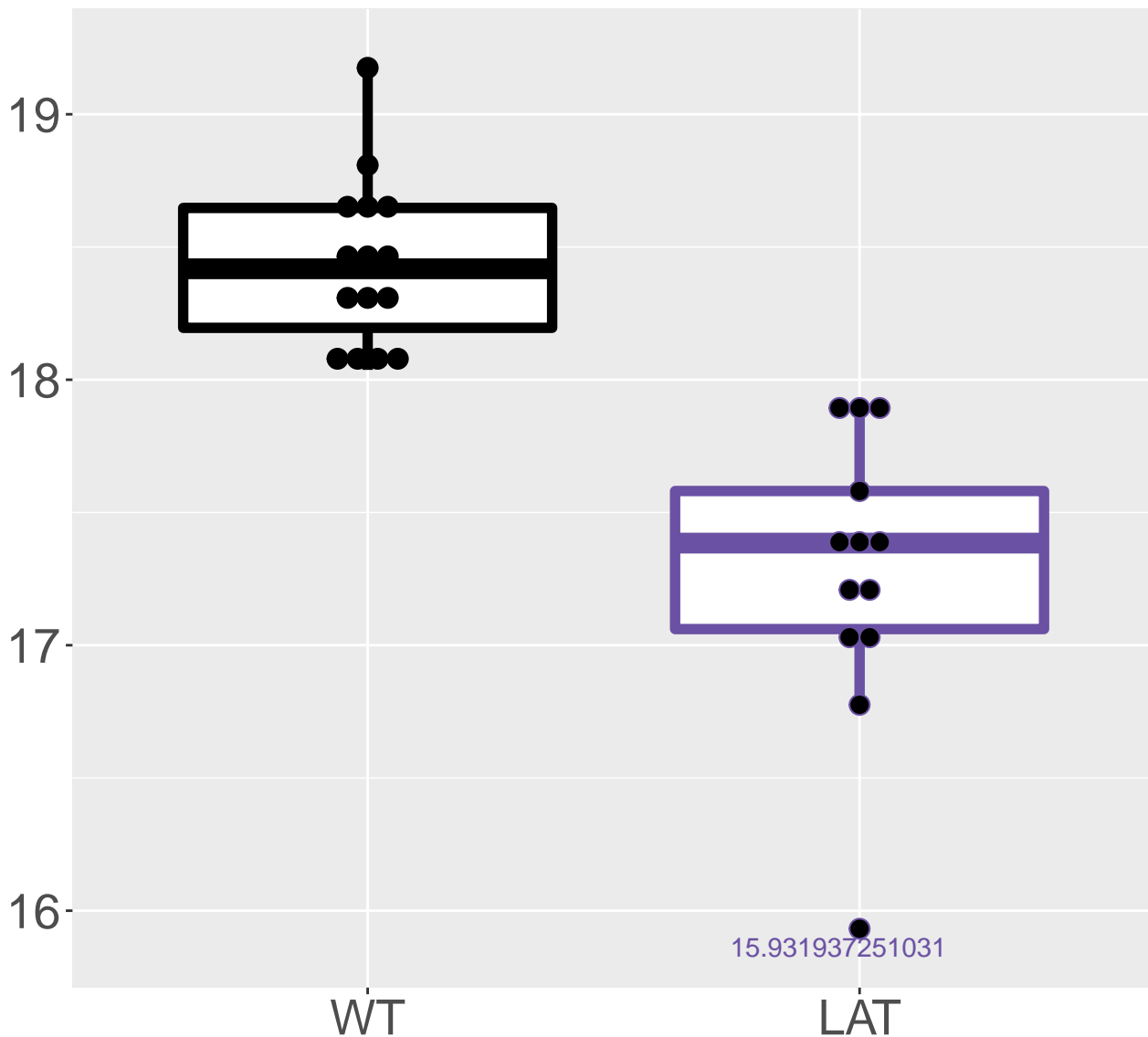
**M859.2709T626.86\_2**

**FDR =  $8.4e-06$ , FC =  $-1.4$**



**M329.1512T174.14**

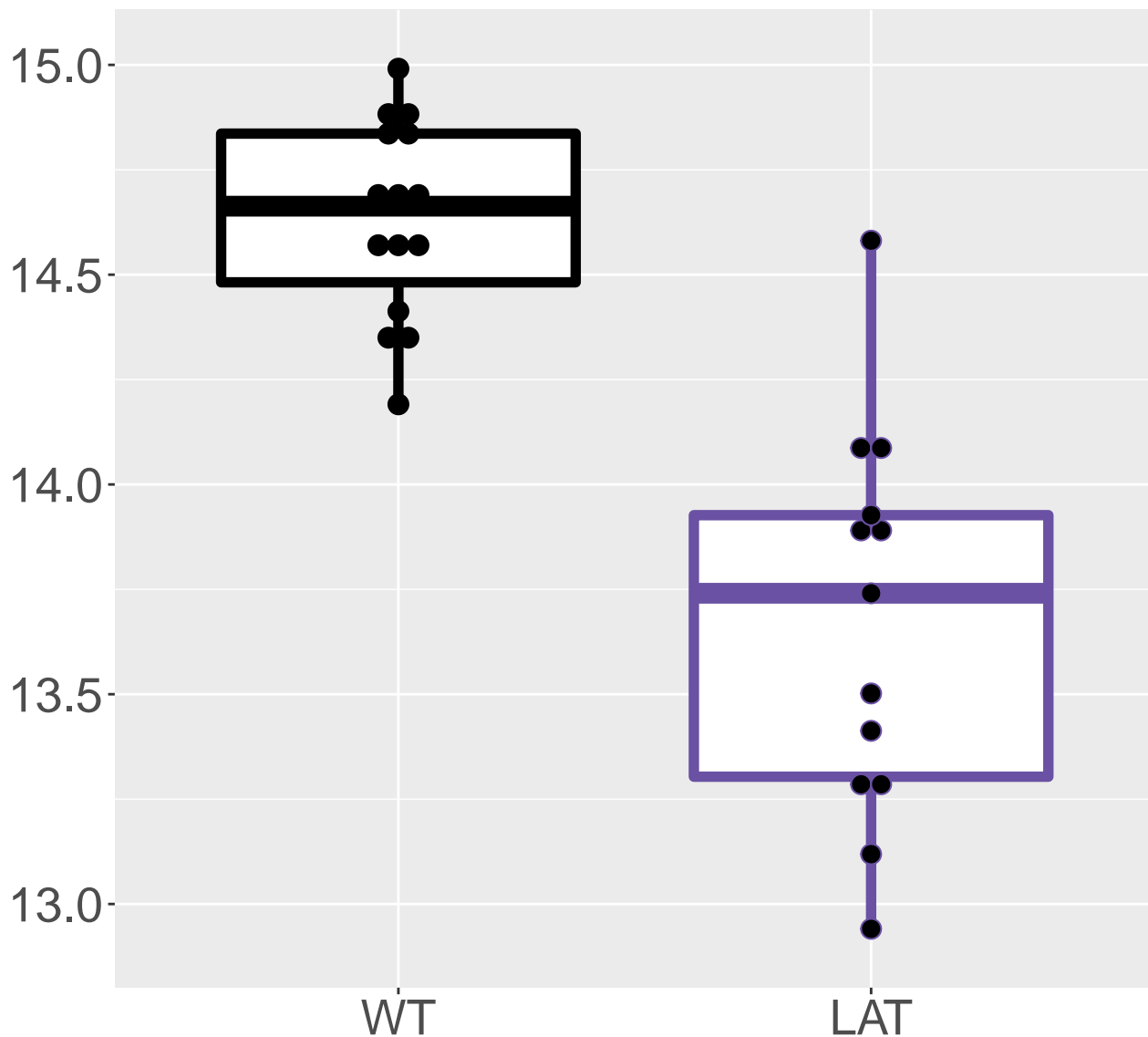
**FDR =  $8.4e-06$ , FC =  $-1.2$**





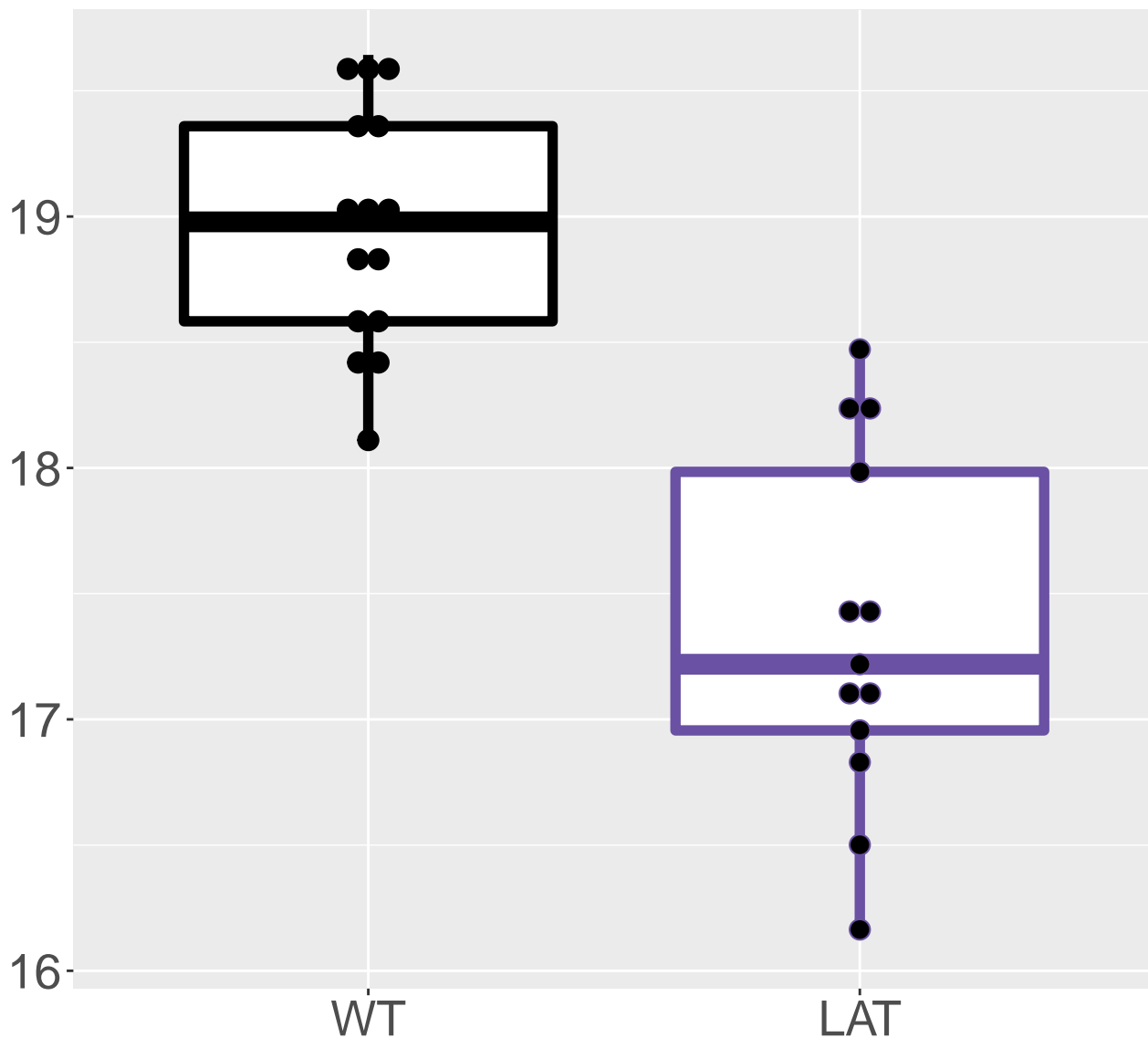
**M973.3714T622.31**

**FDR =  $8.4e-06$ , FC =  $-0.96$**

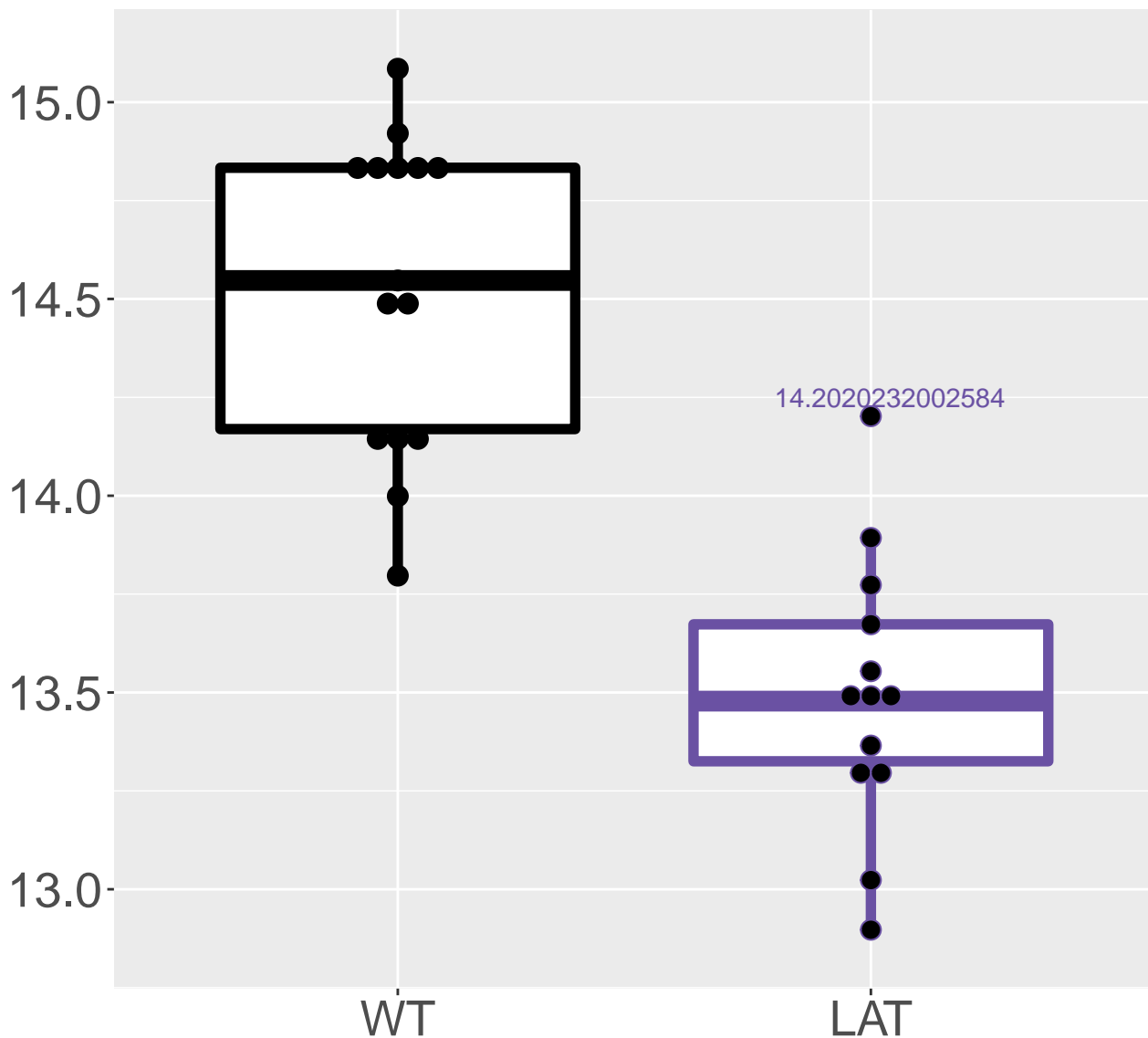


**M640.1867T538.29**

**FDR =  $8.7\text{e-}06$ , FC =  $-1.6$**

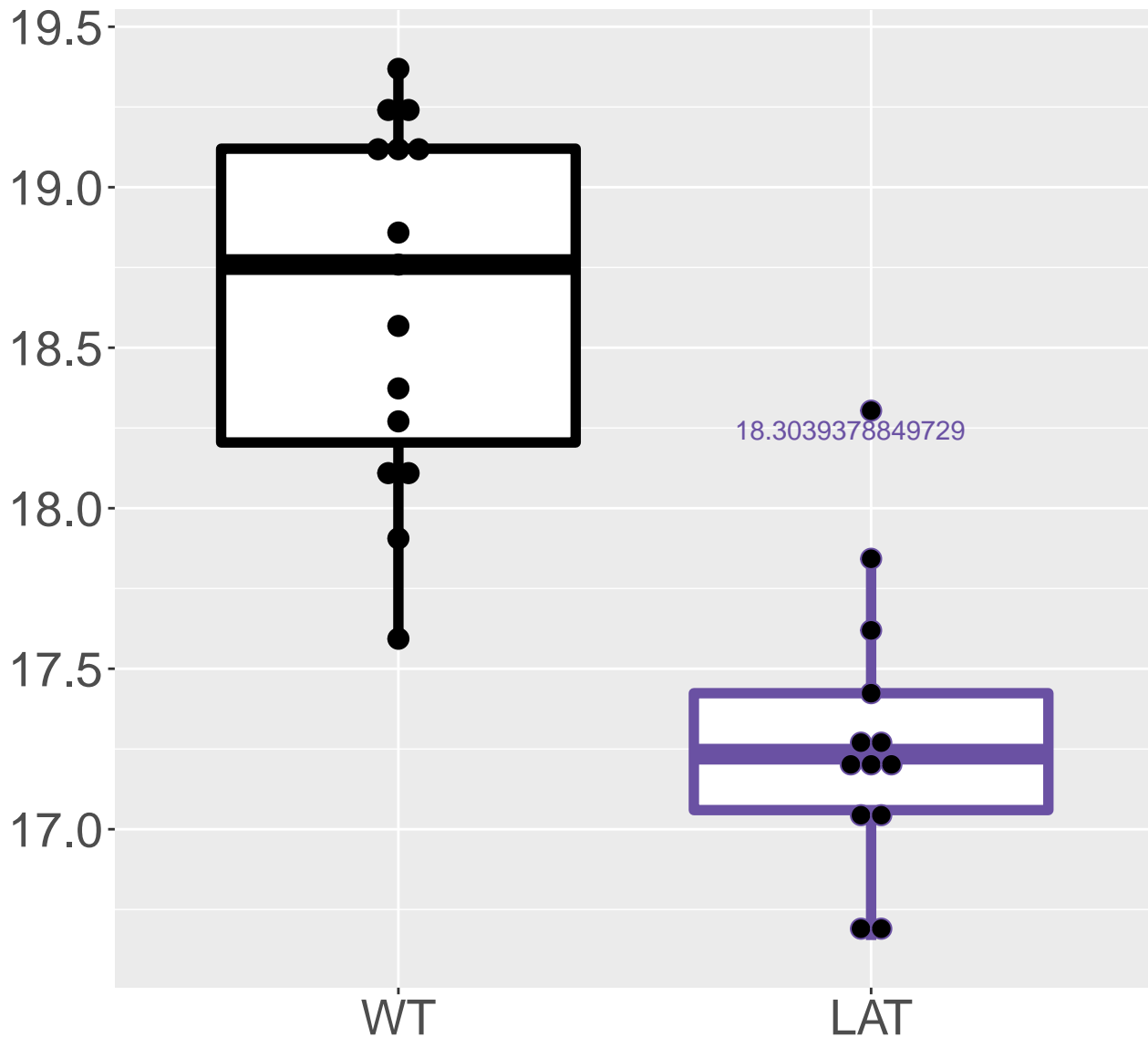


**M591.1423T589.67**  
**FDR = 8.8e-06, FC = -1**



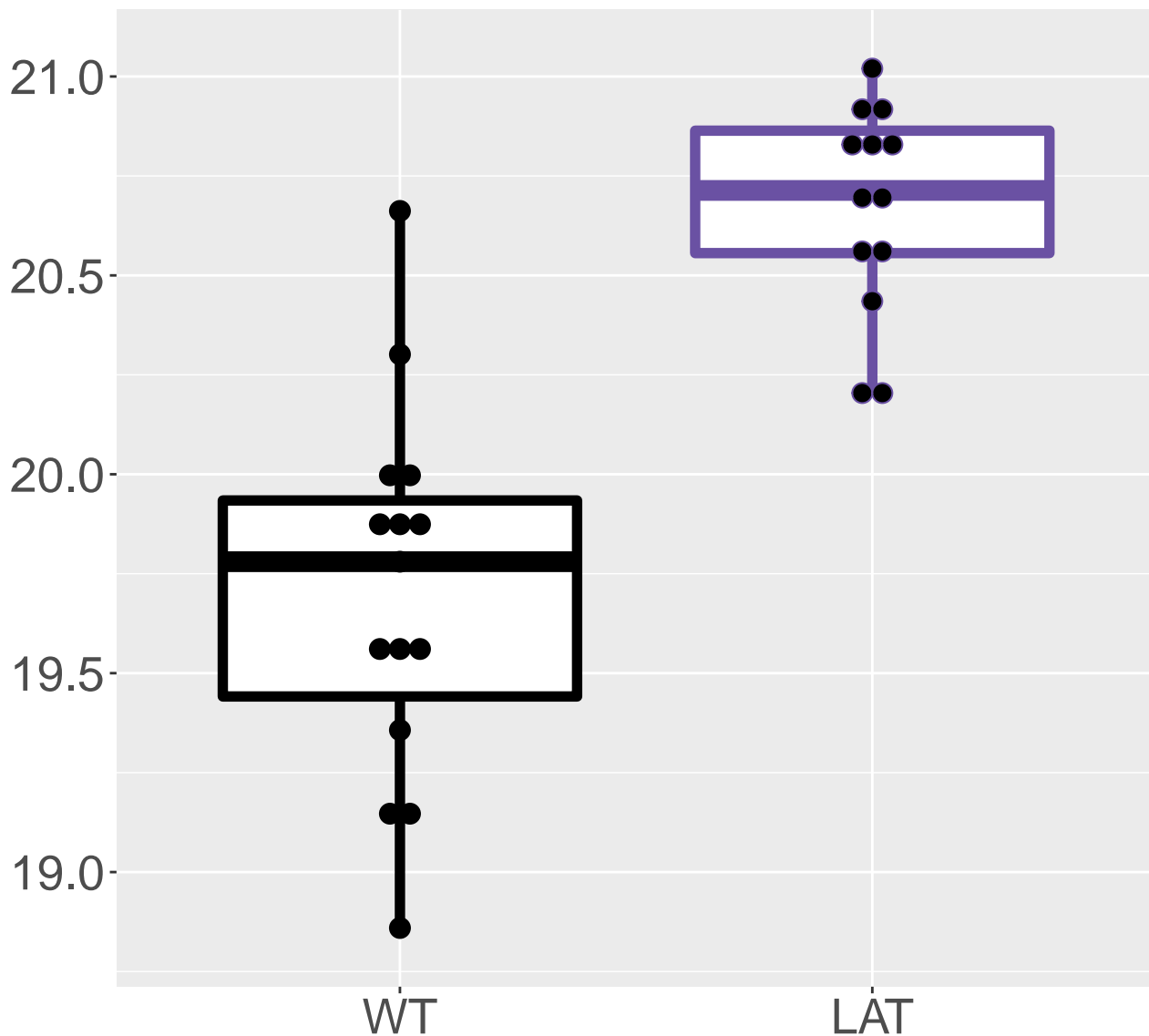
**M858.7697T626.86\_1**

**FDR =  $9.8e-06$ , FC =  $-1.4$**

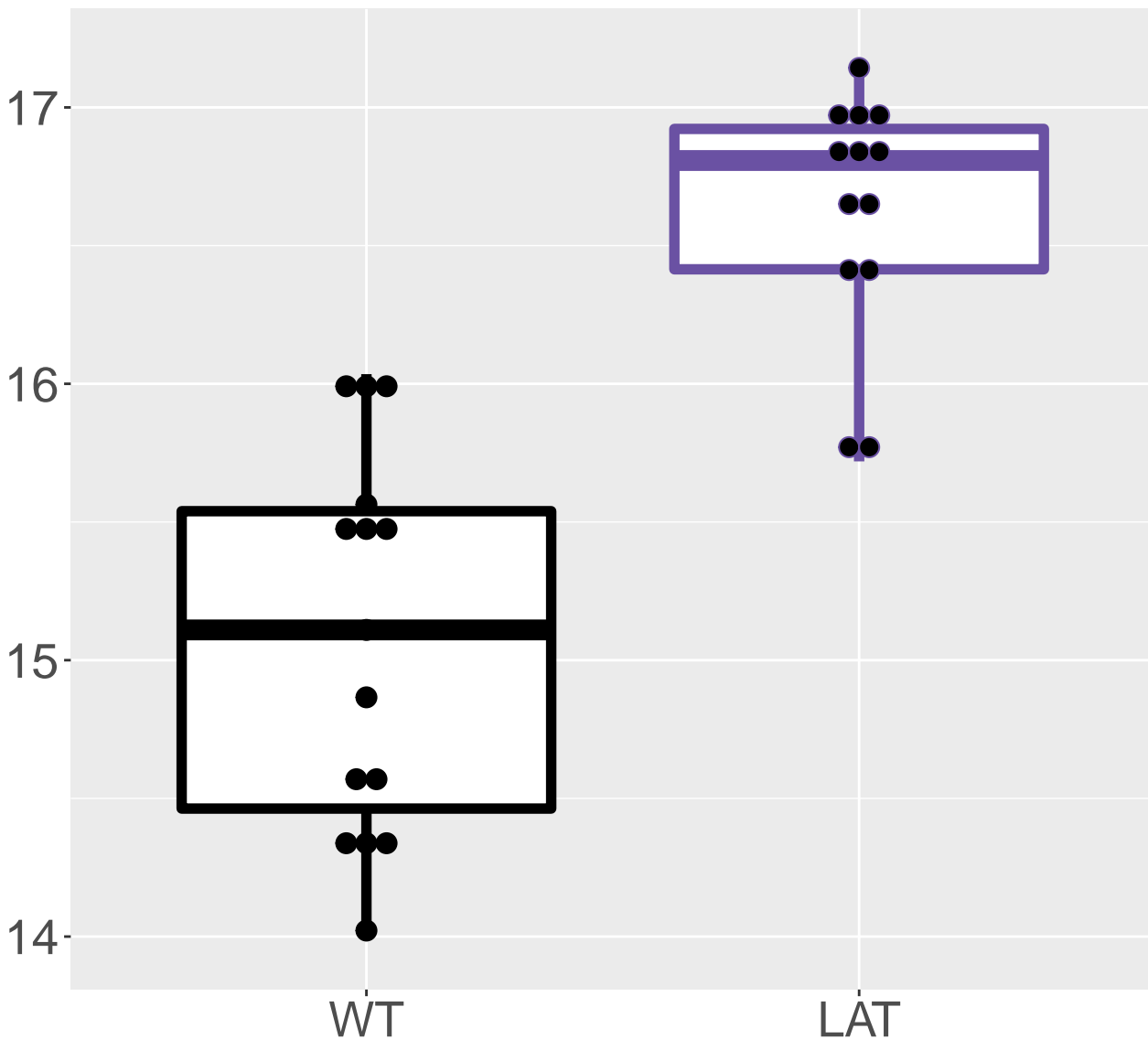


**M652.2337T299.61**

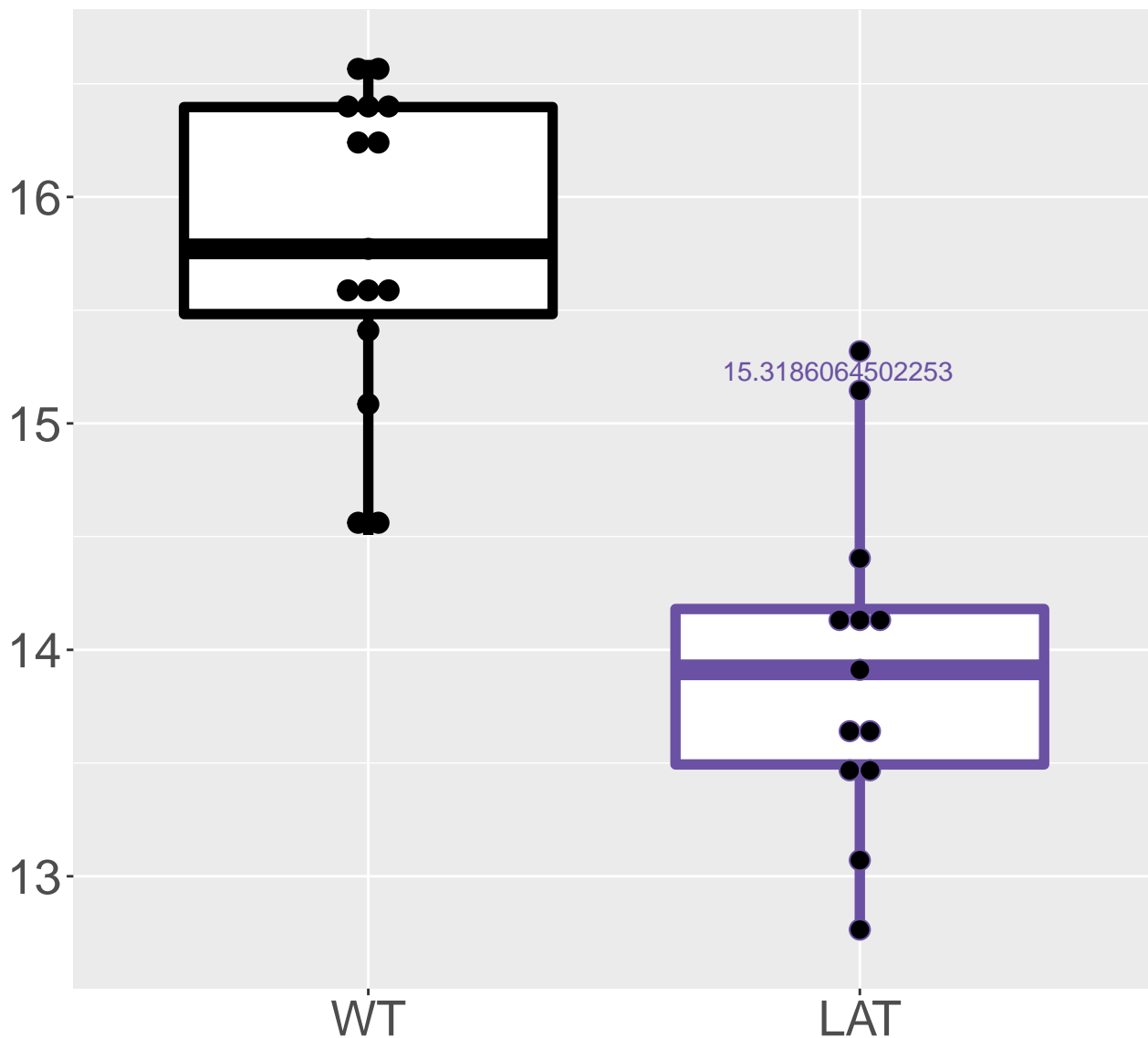
**FDR =  $9.8e-06$ , FC = 0.96**



**Guanosine 5'-diphospho- $\hat{I}^2$ -L-fucose;GDP- $\hat{I}^2$ -**  
**FDR = 1e-05, FC = 1.6**

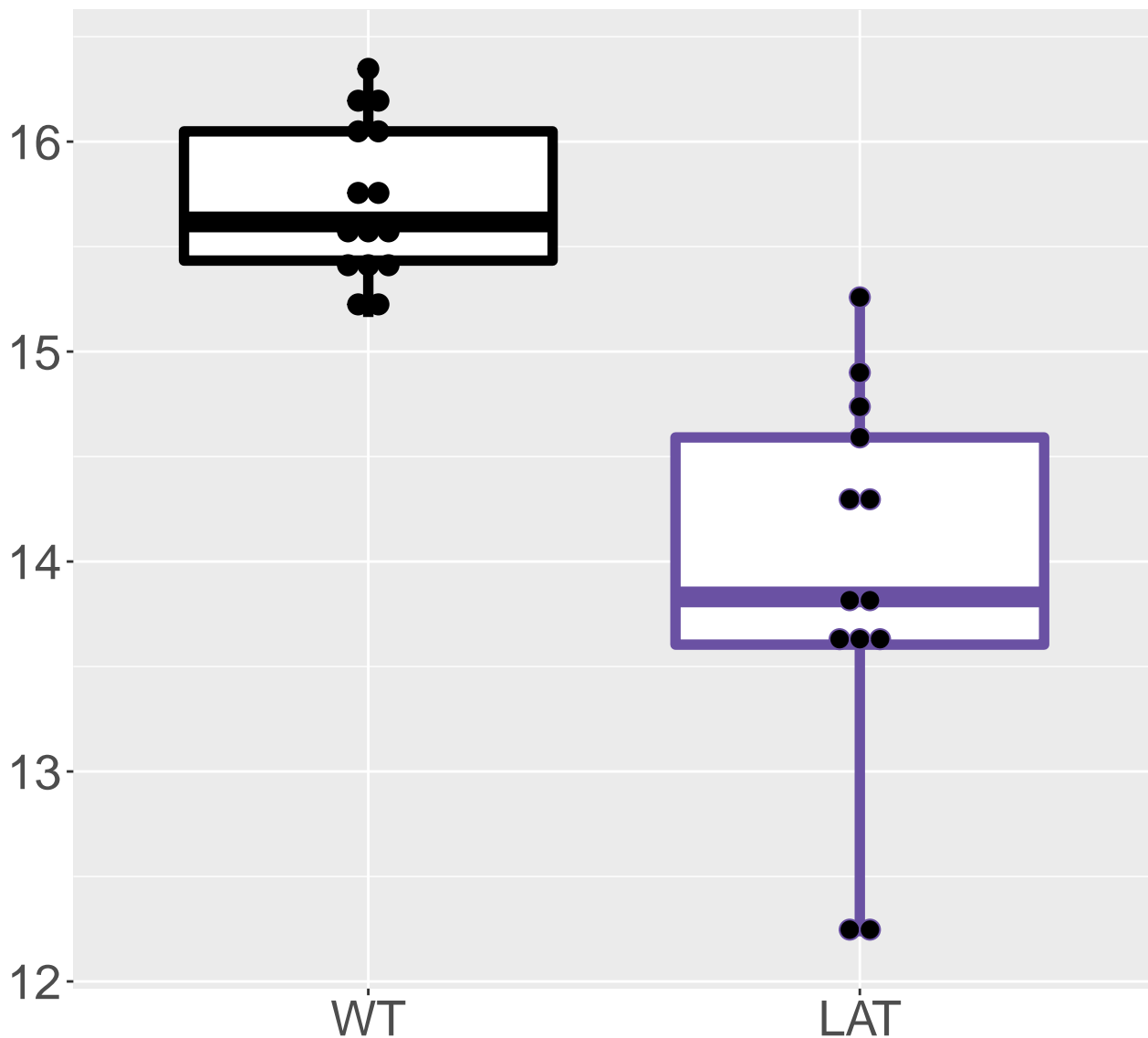


**M828.7746T627.42\_1**  
**FDR = 1.1e-05, FC = -1.9**



**M481.2409T177.4**

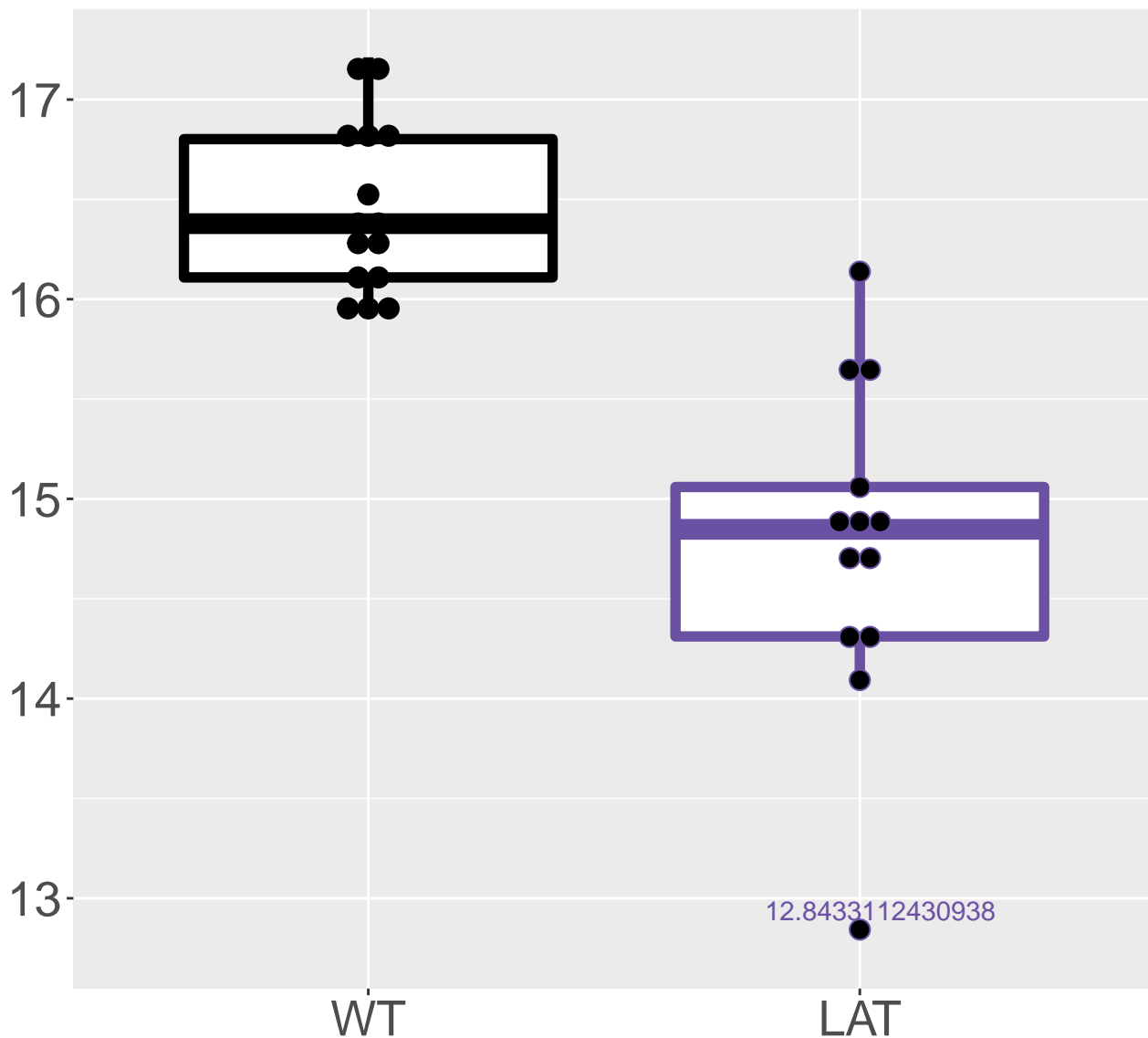
**FDR = 1.1e-05, FC = -1.8**





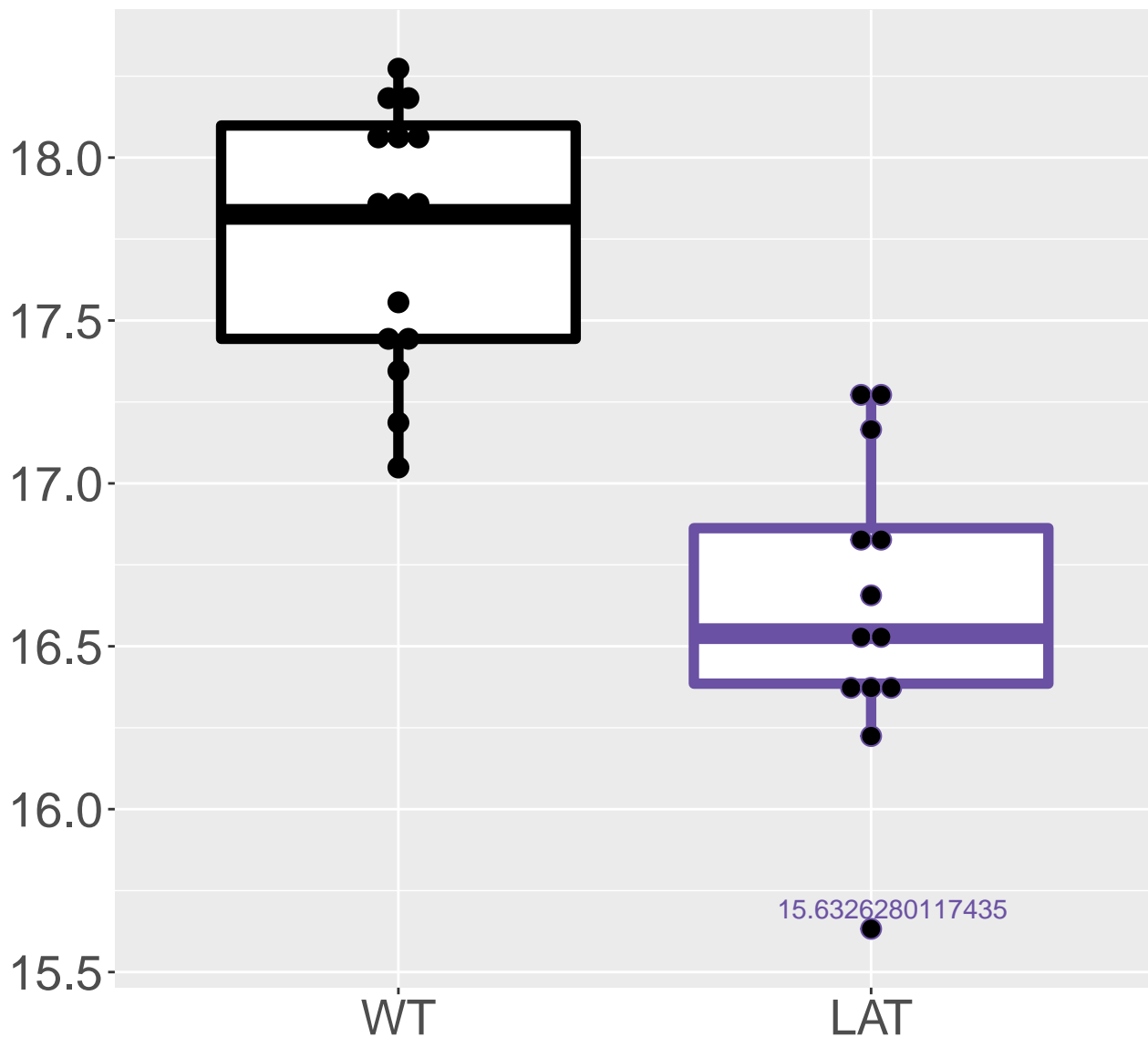
**M740.2475T535.96**

**FDR = 1.1e-05, FC = -1.7**

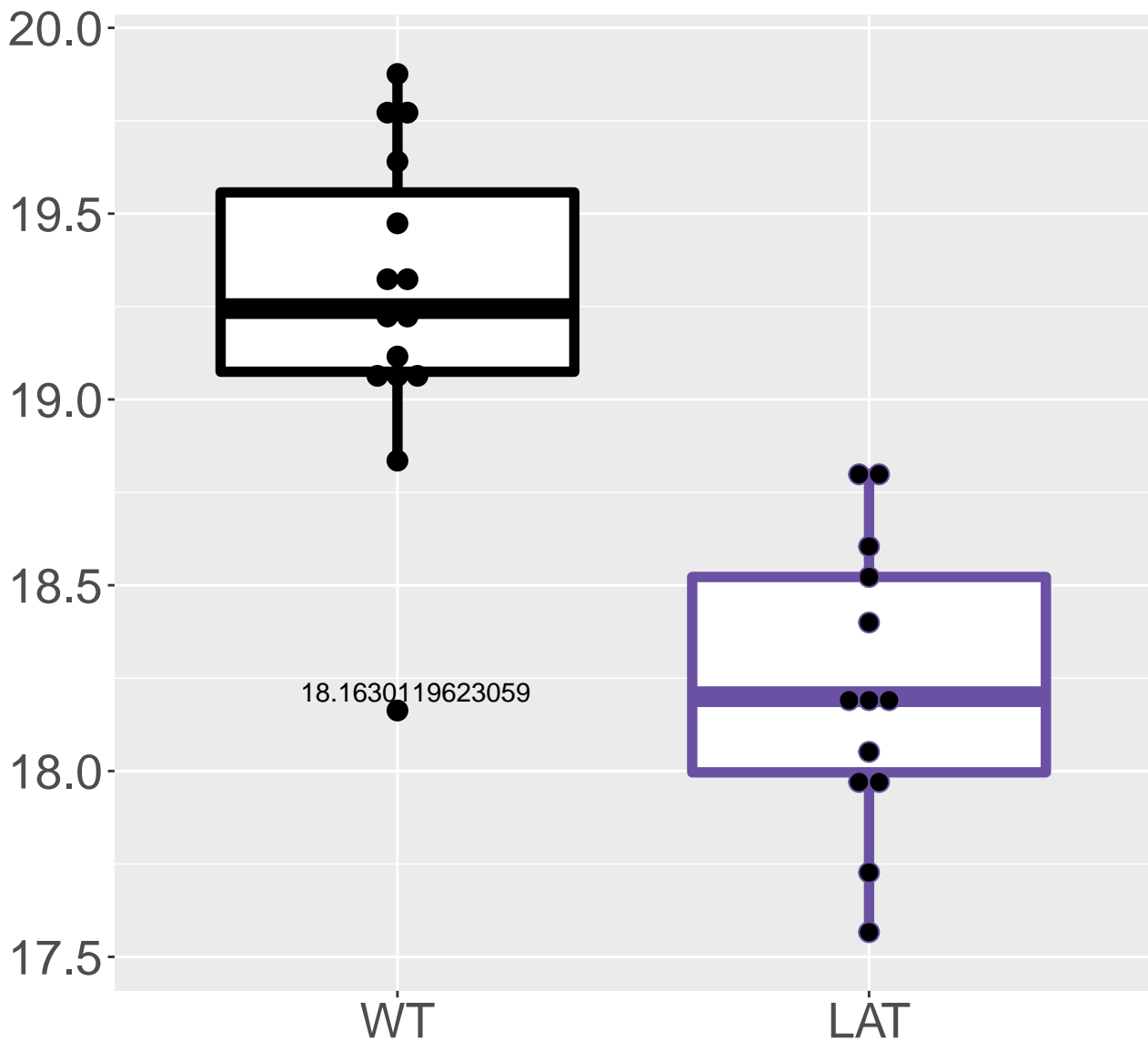


**M220.1075T205.85**

**FDR = 1.1e-05, FC = -1.1**

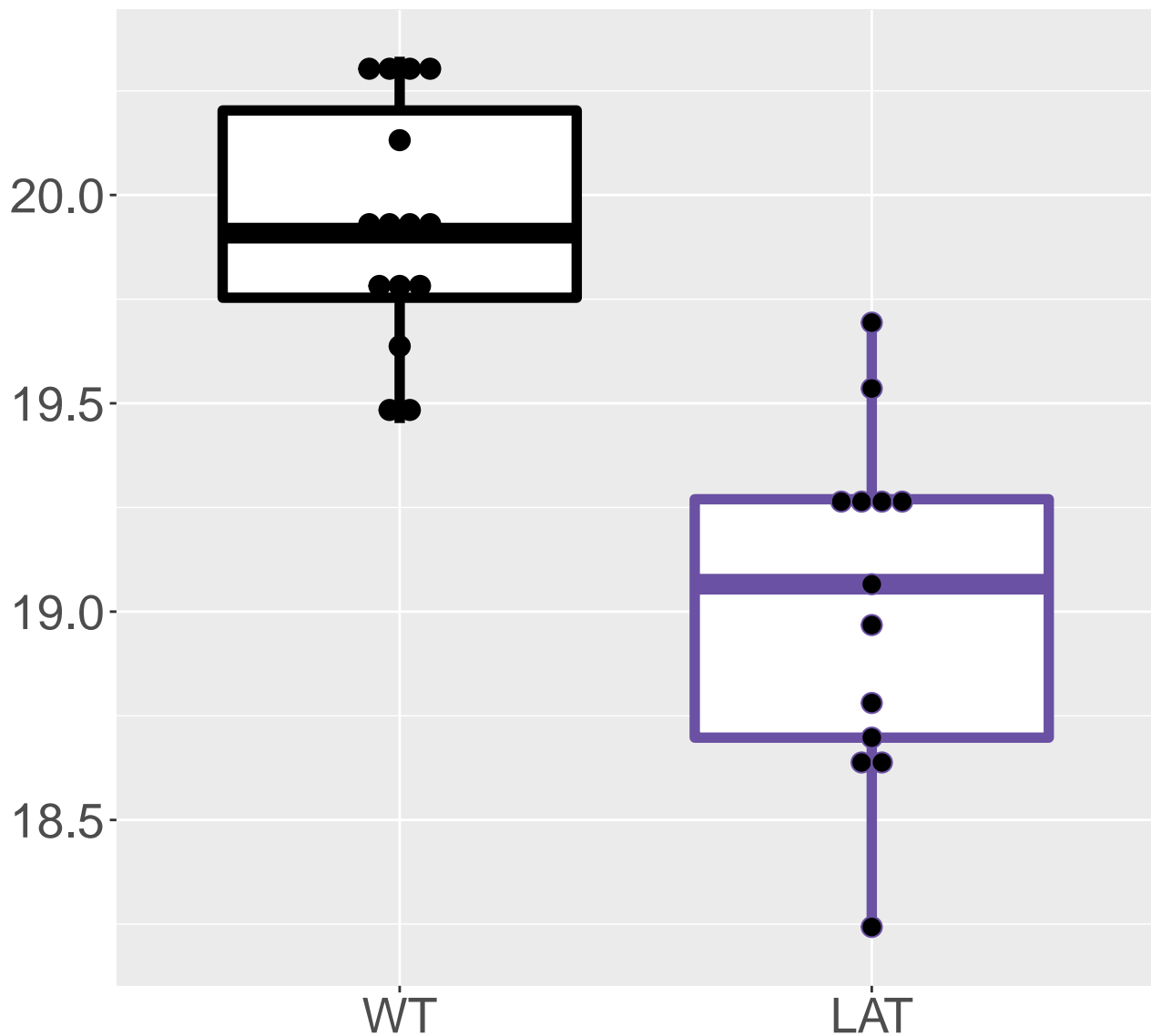


**M367.1362T322.37**  
**FDR = 1.1e-05, FC = -1**



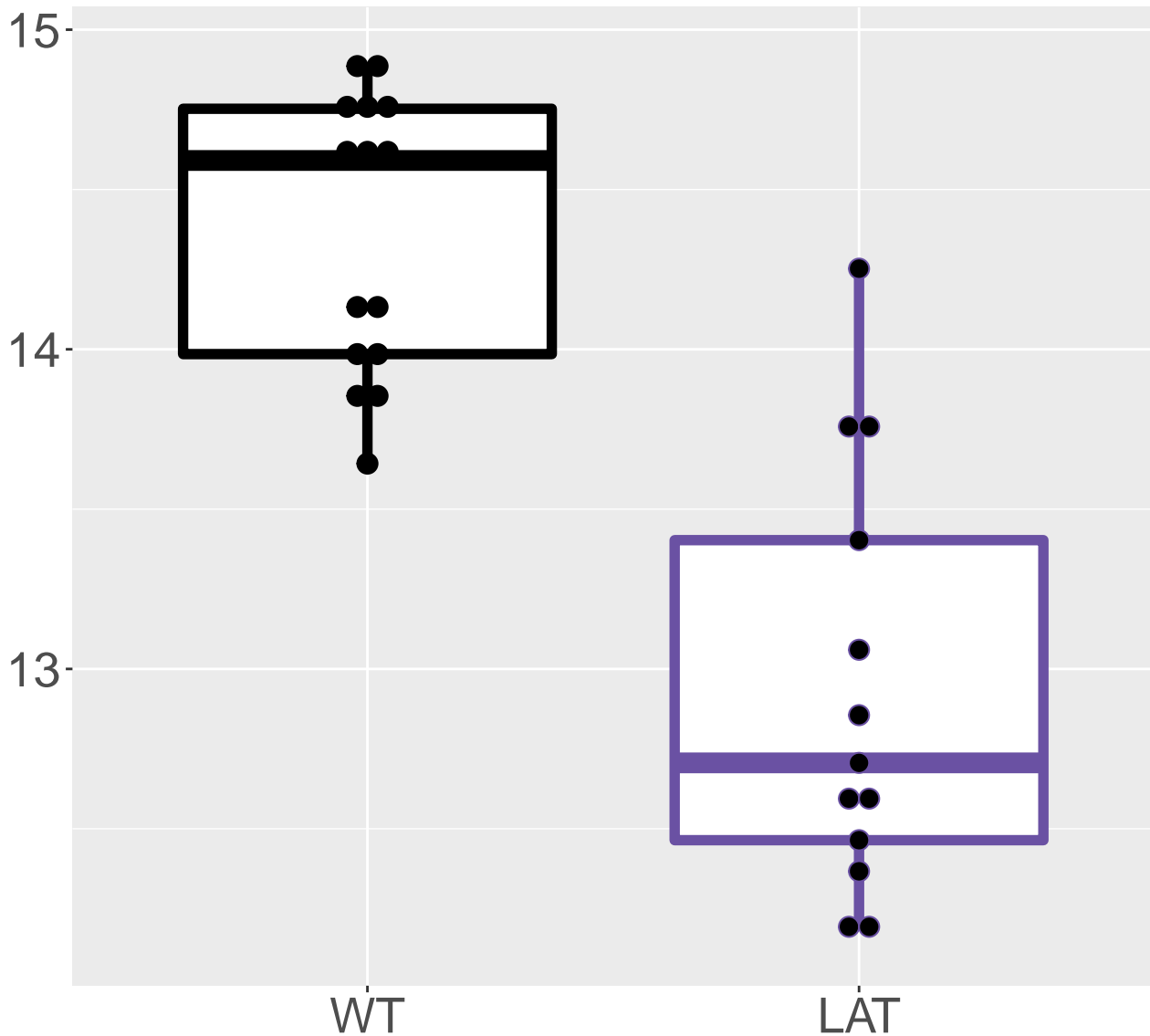
**M593.158T587.63**

**FDR = 1.2e-05, FC = -0.91**



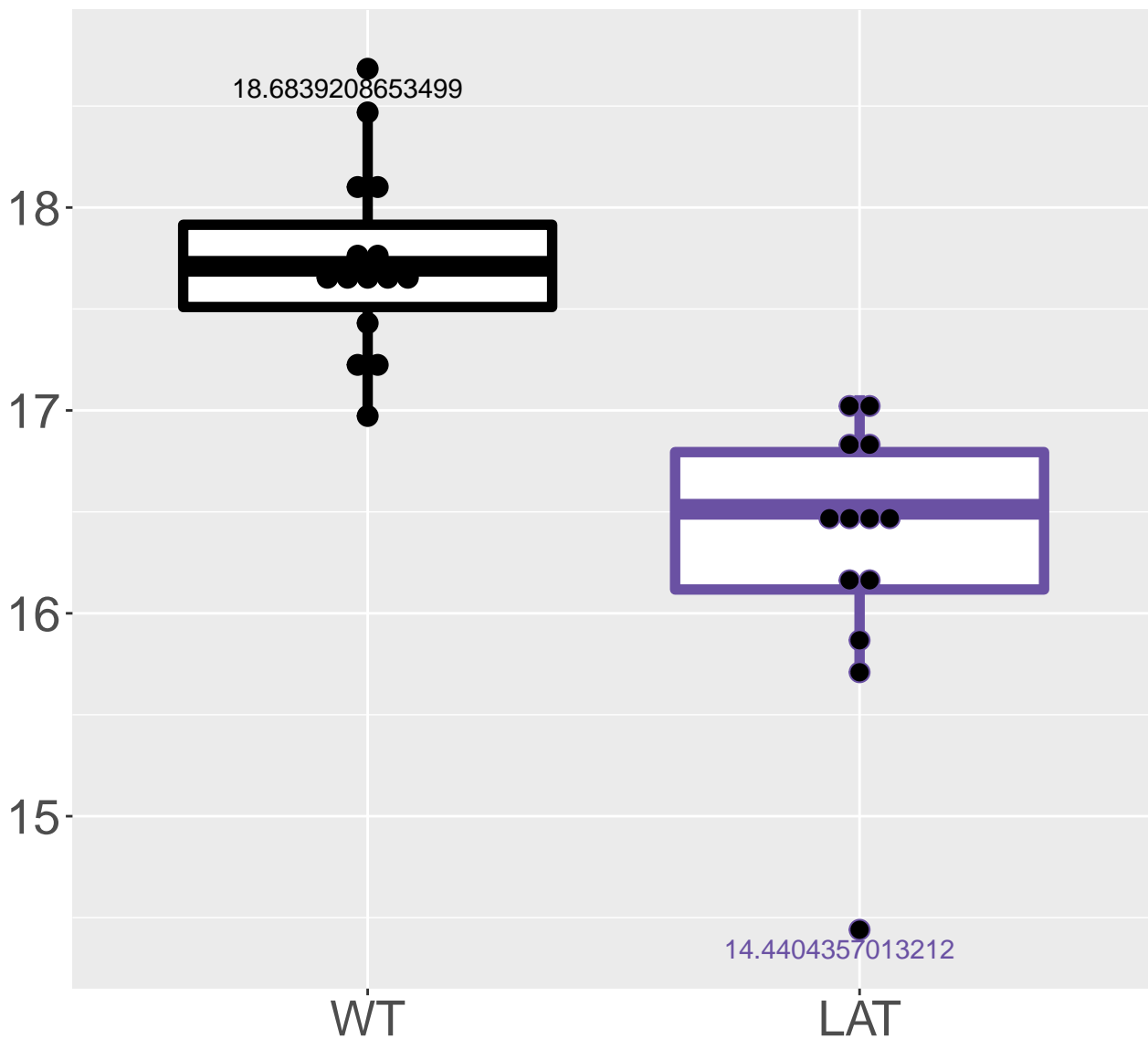
**M437.4722T659.64\_2**

**FDR = 1.3e-05, FC = -1.4**



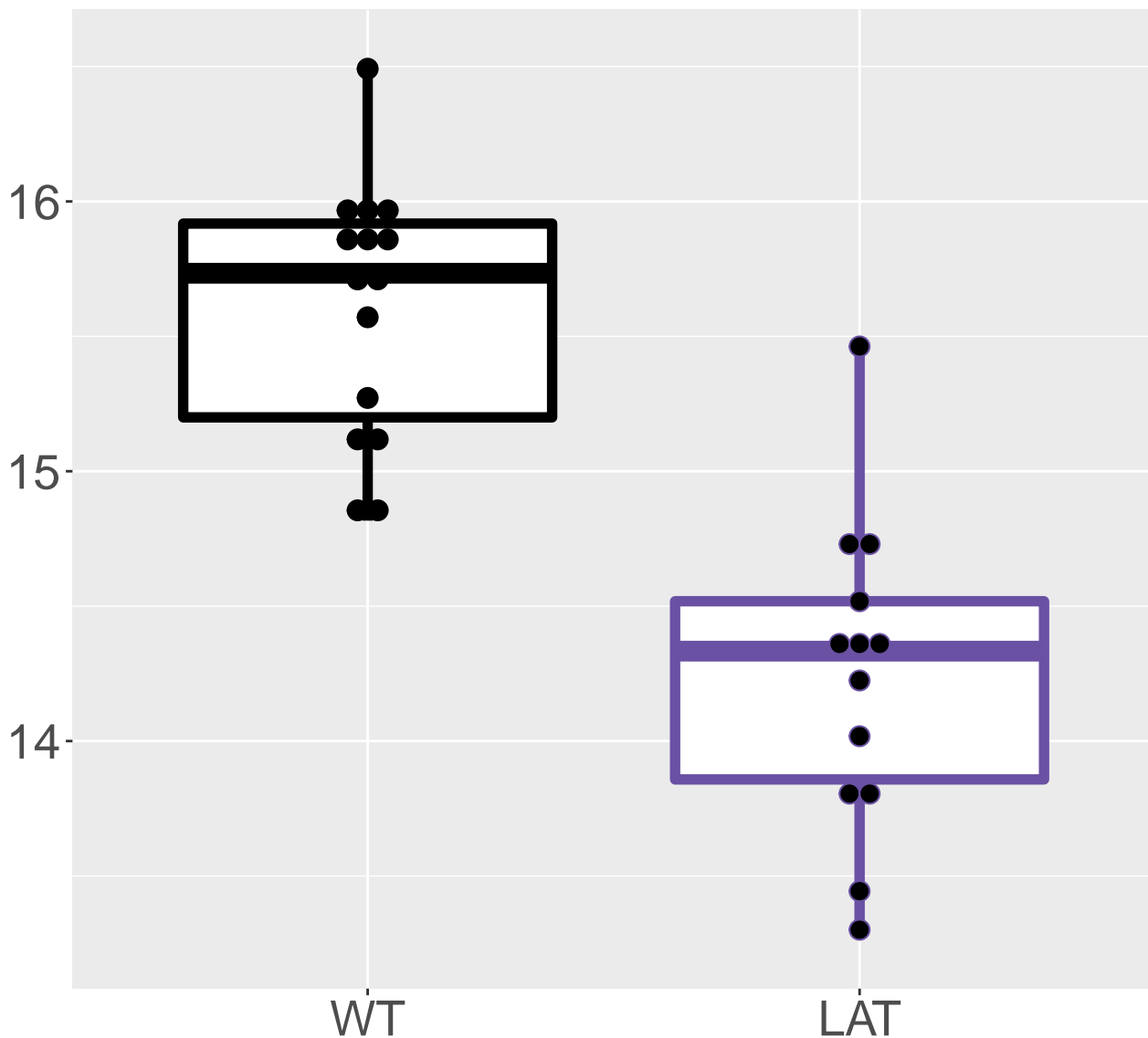
**M499.2151T331.16**

**FDR =  $1.3e-05$ , FC =  $-1.4$**



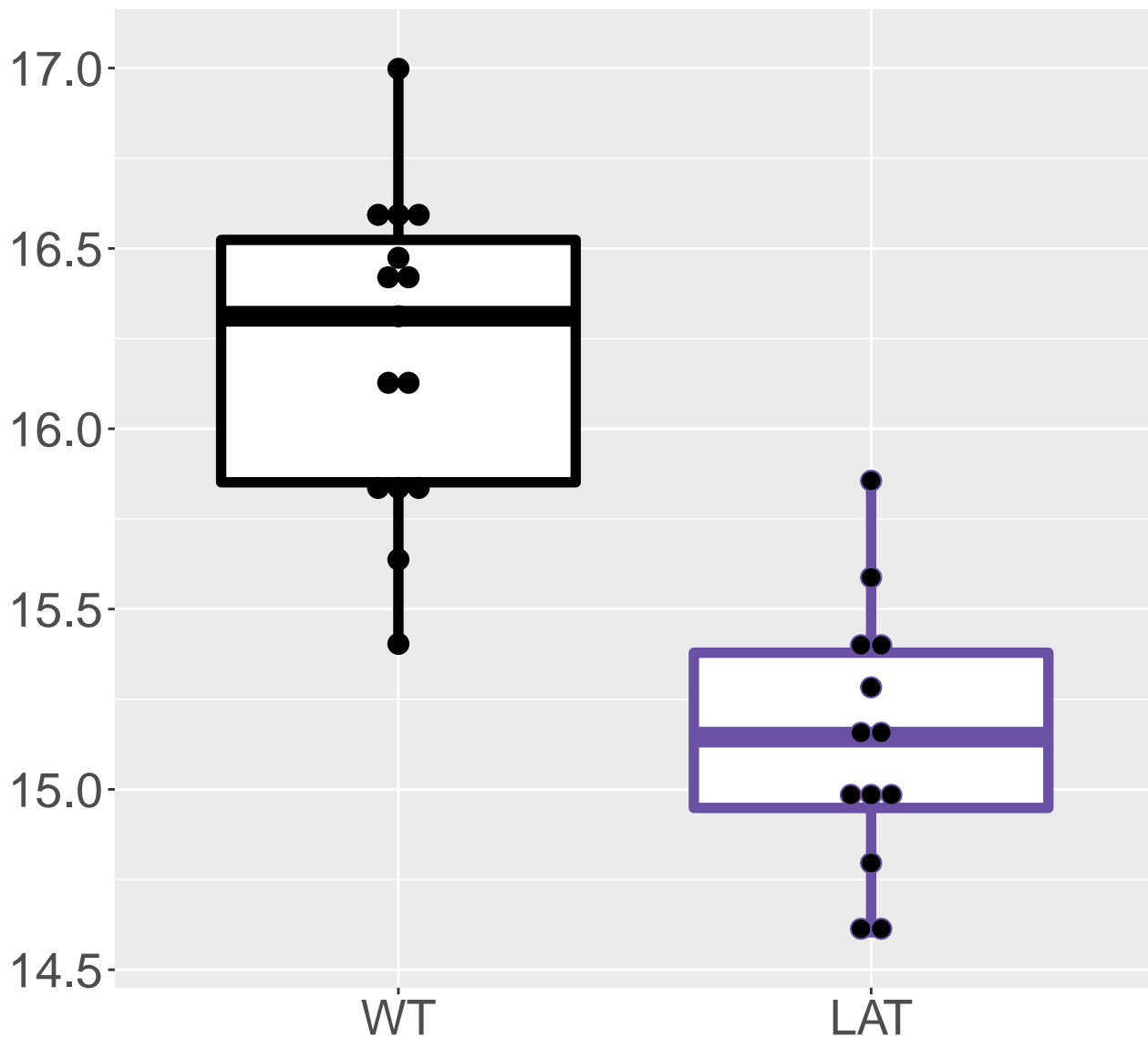
**M478.1685T517.12**

**FDR =  $1.3e-05$ , FC =  $-1.4$**



**M722.2367T575.31**

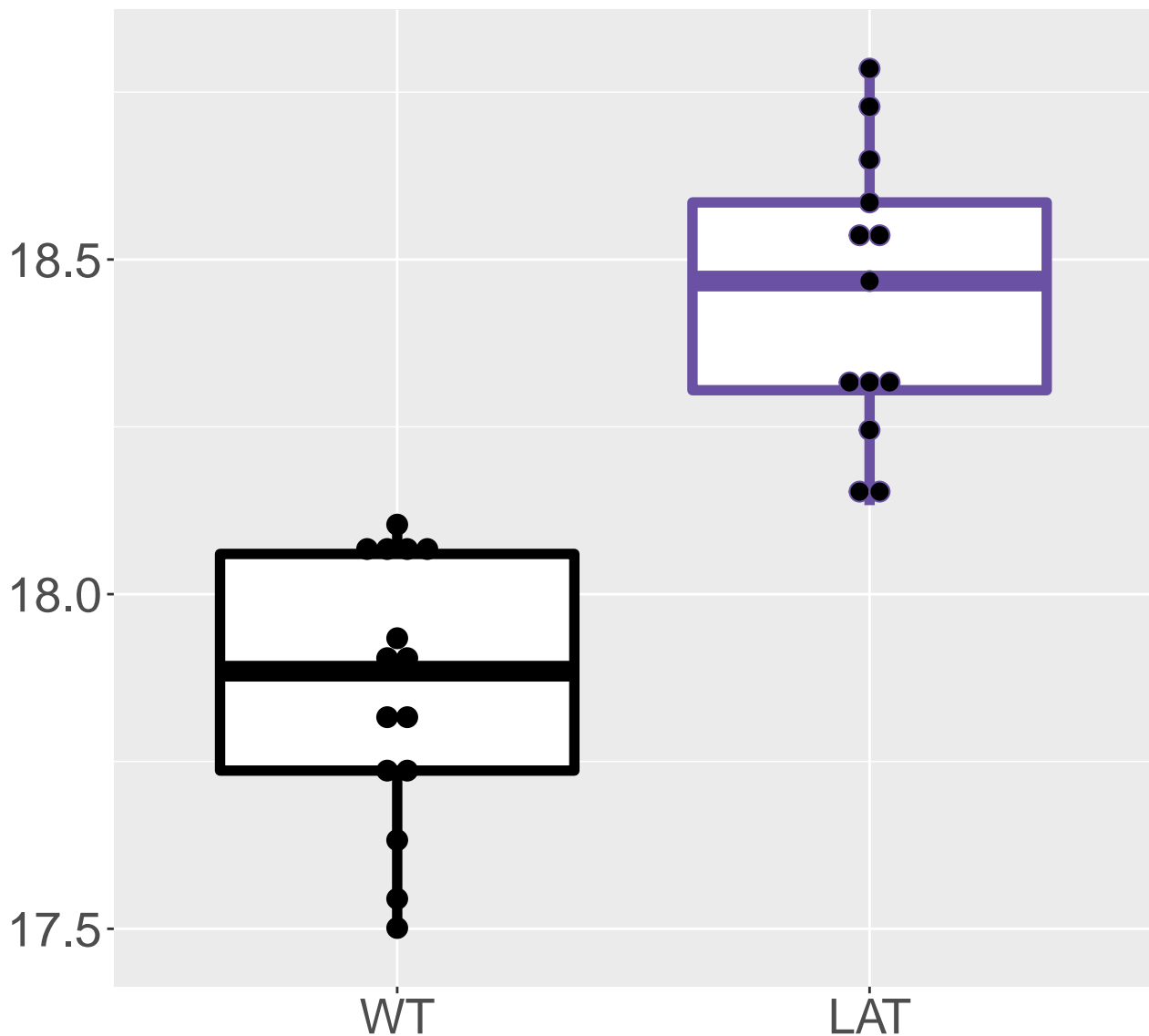
**FDR = 1.3e-05, FC = -1.1**





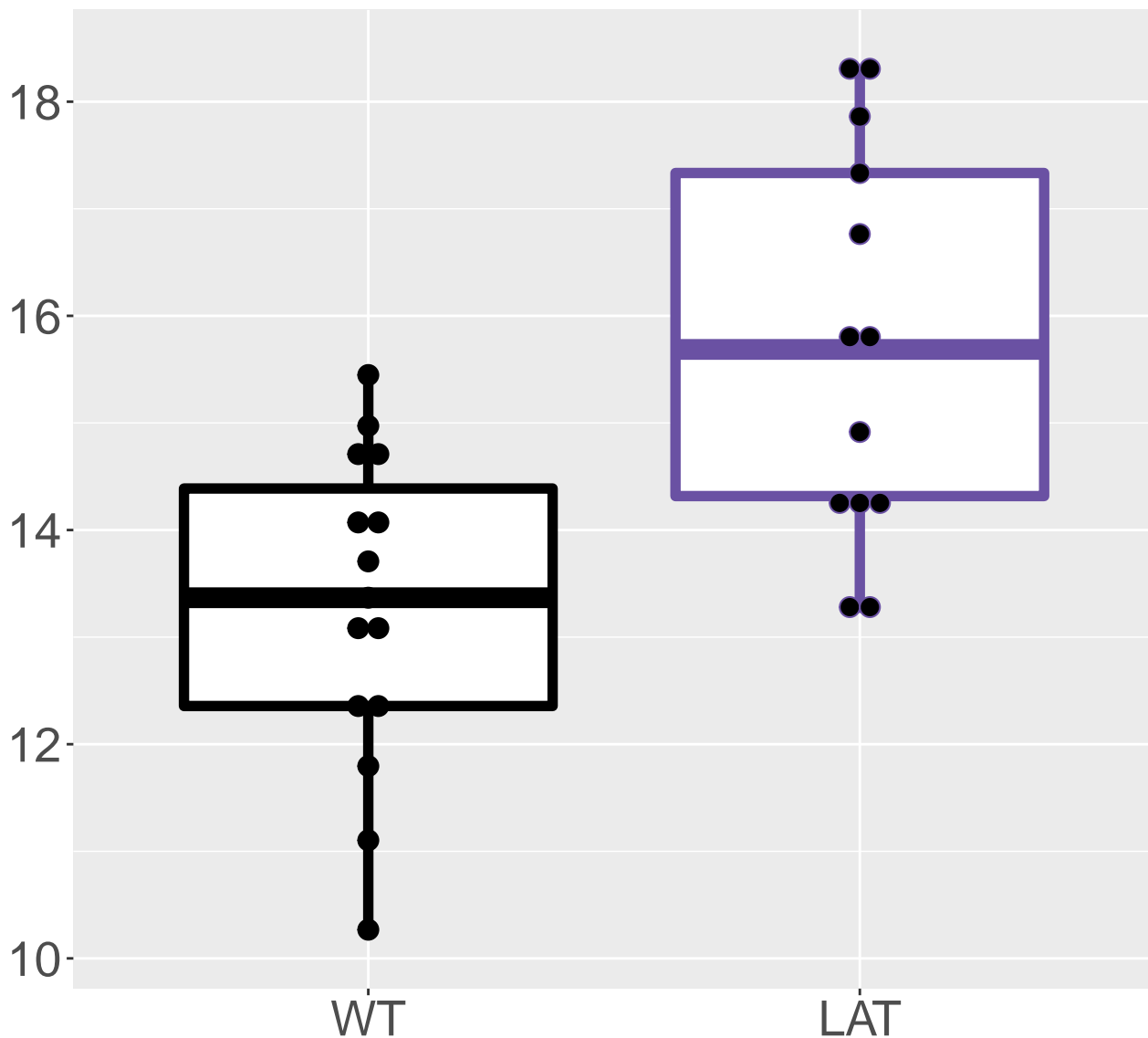
**M414.1273T310.43**

**FDR = 1.4e-05, FC = 0.59**



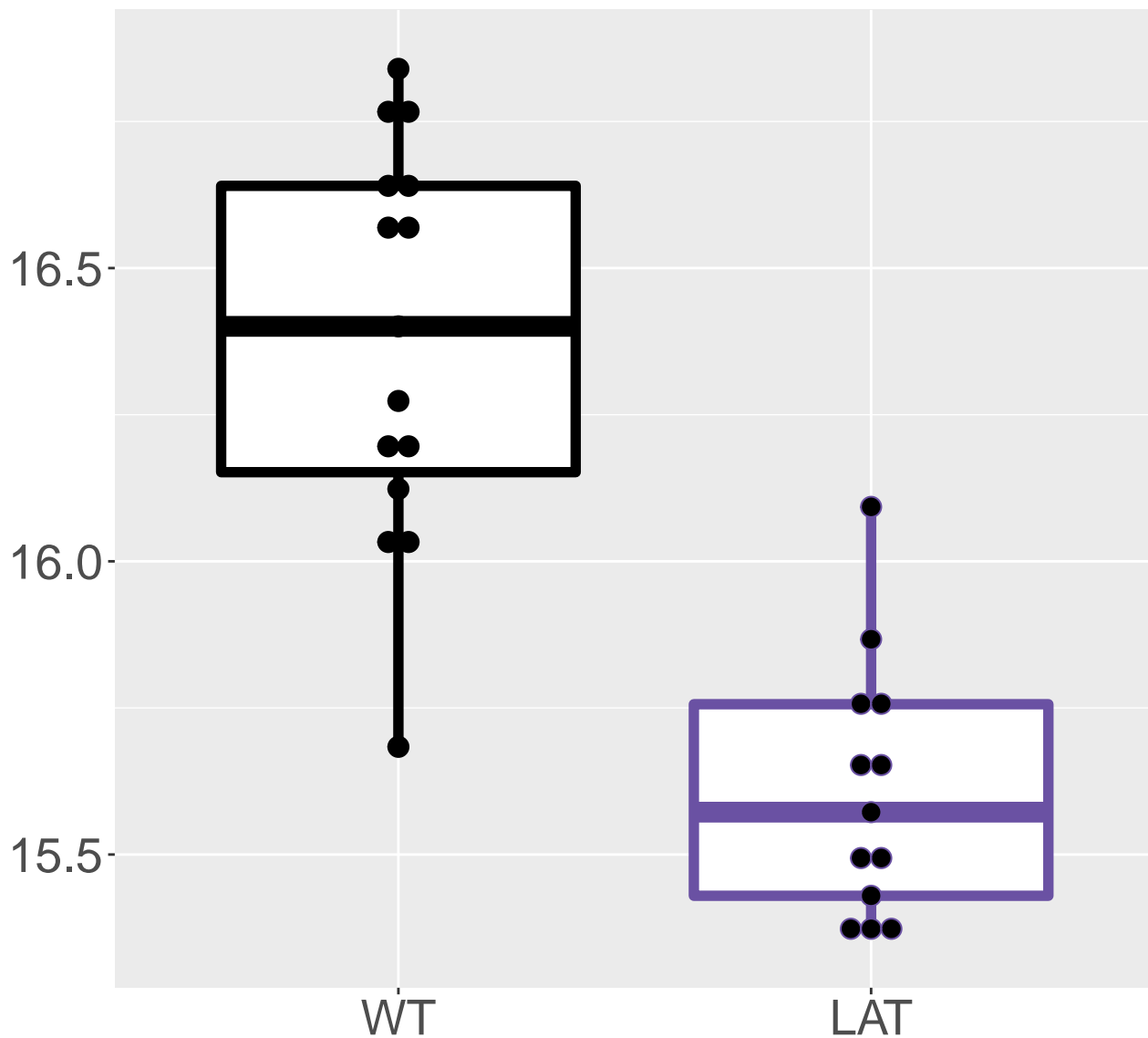
**M866.2204T584.79**

**FDR = 1.4e-05, FC = 2.5, sex\*\*\***



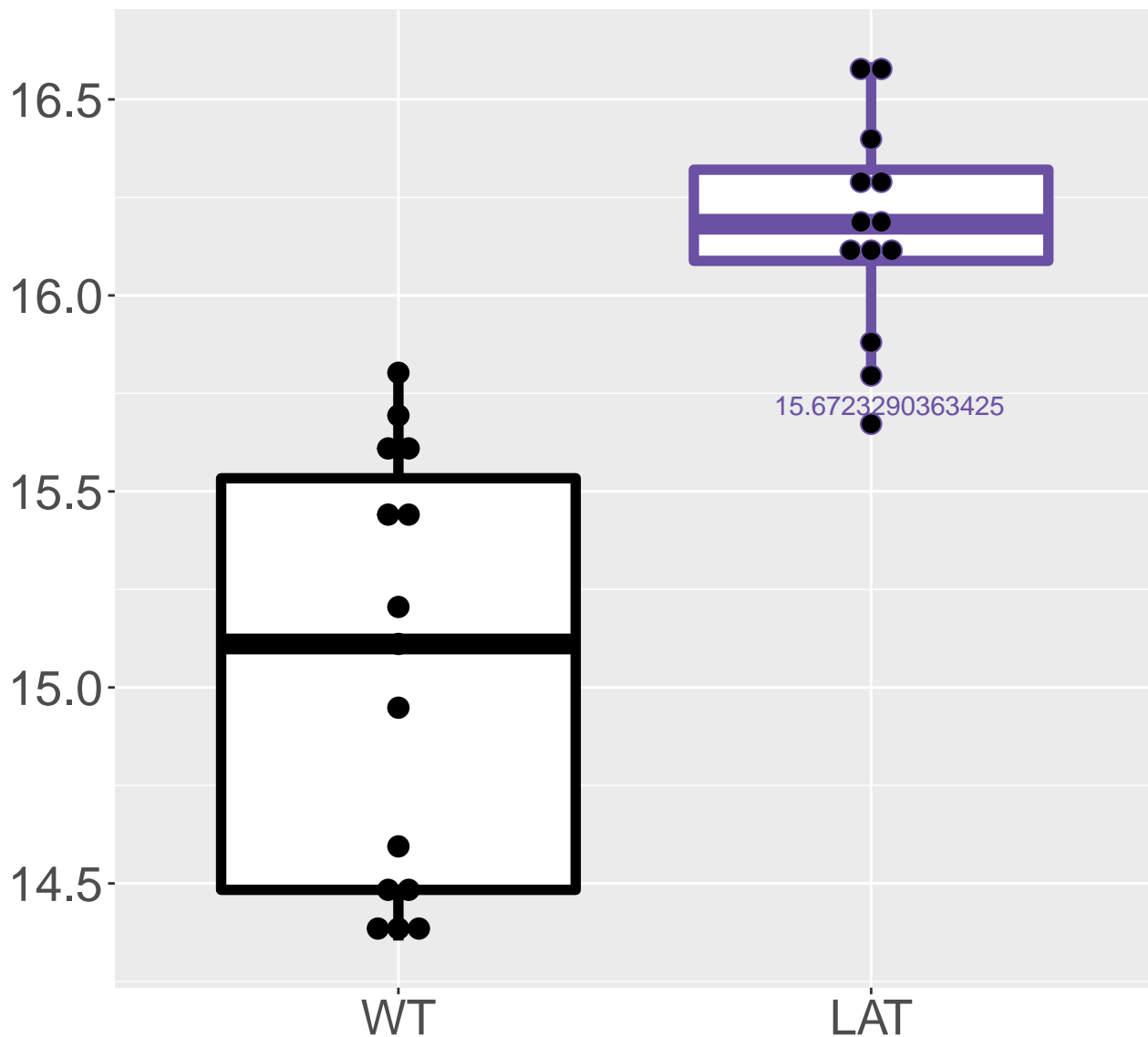
**M825.2533T638.22**

**FDR =  $1.5e-05$ , FC =  $-0.77$**

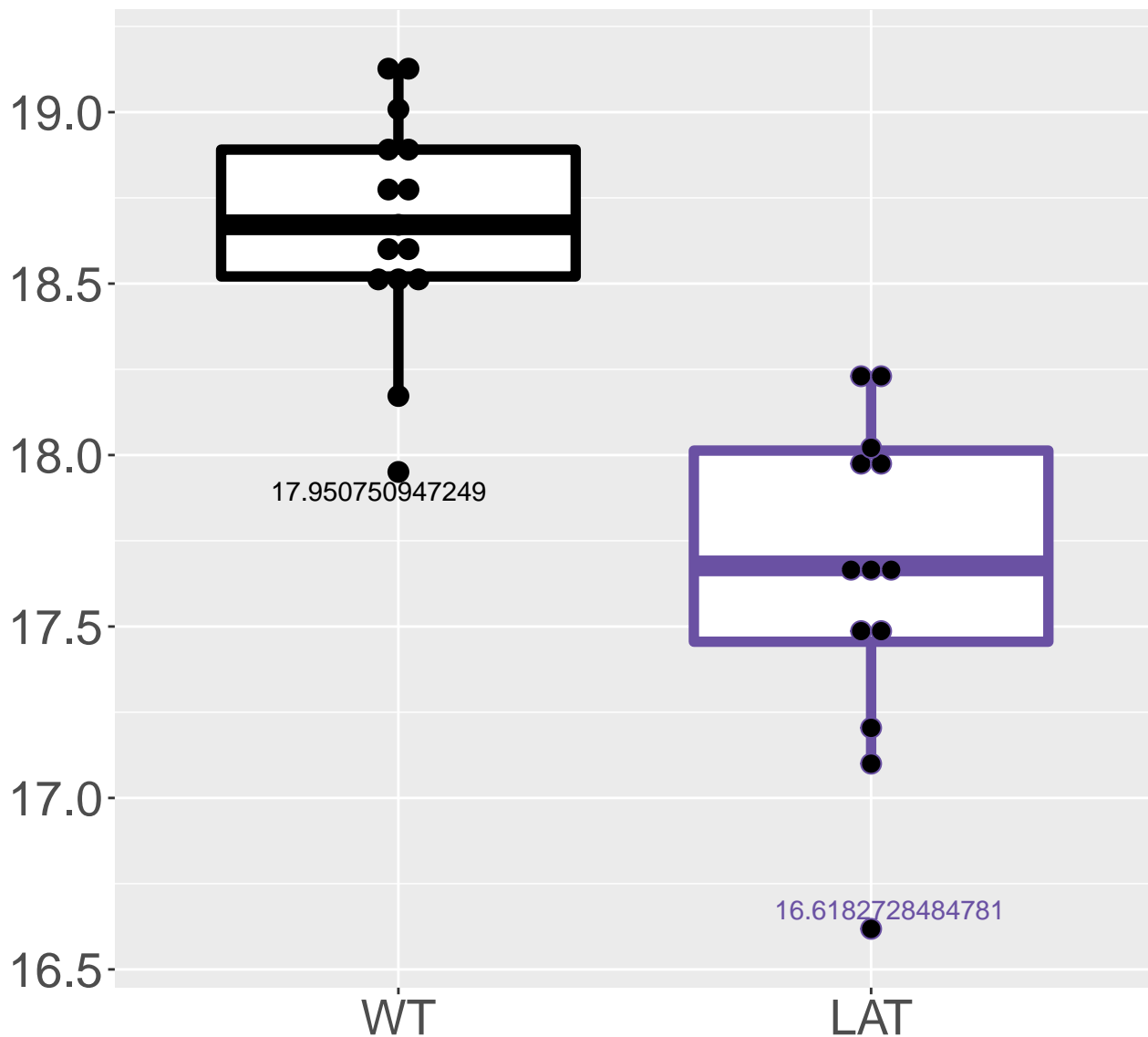


**M293.5344T612.95**

**FDR = 1.7e-05, FC = 1.1**

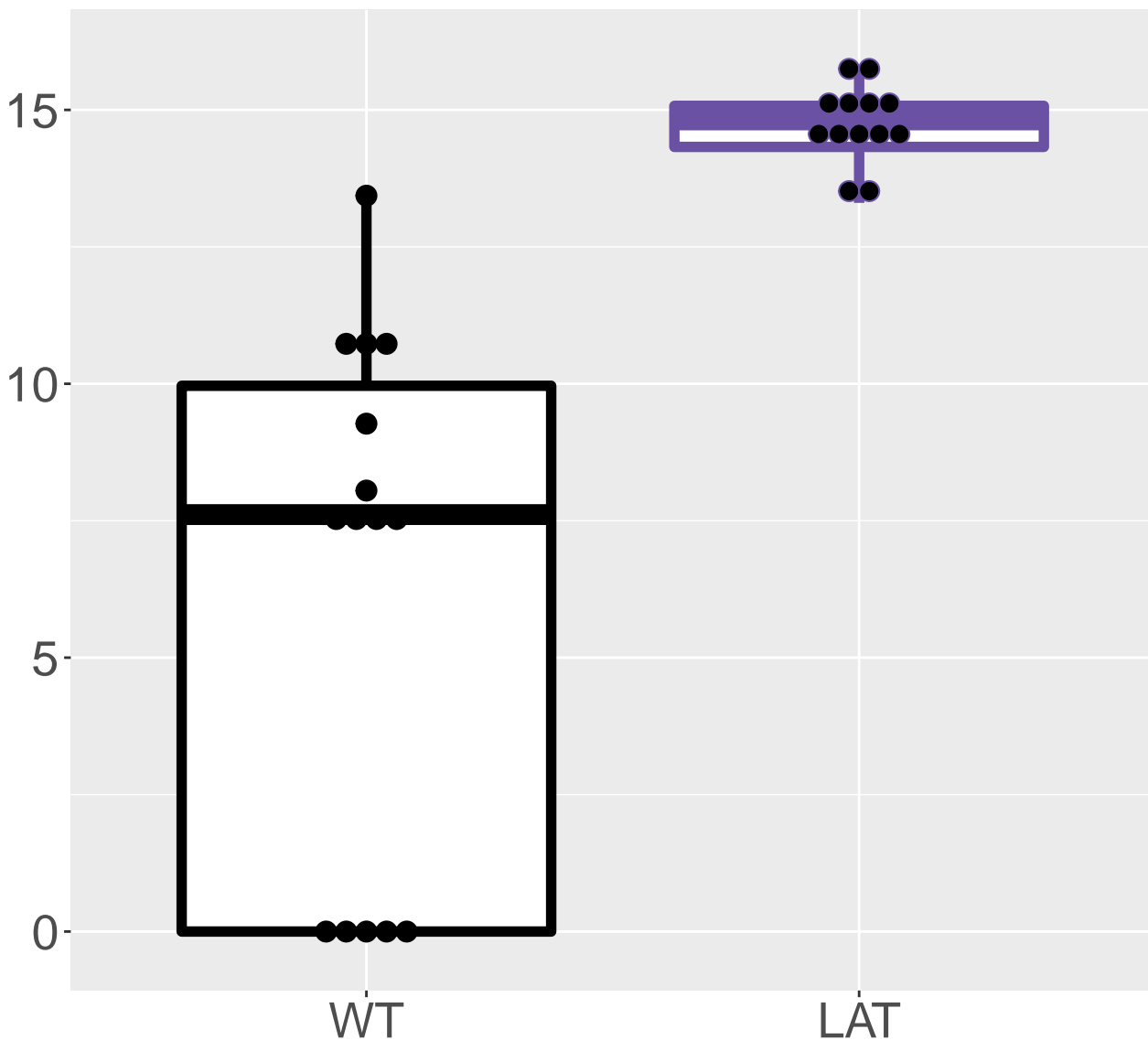


**M261.1823T217**  
**FDR = 1.7e-05, FC = -1**

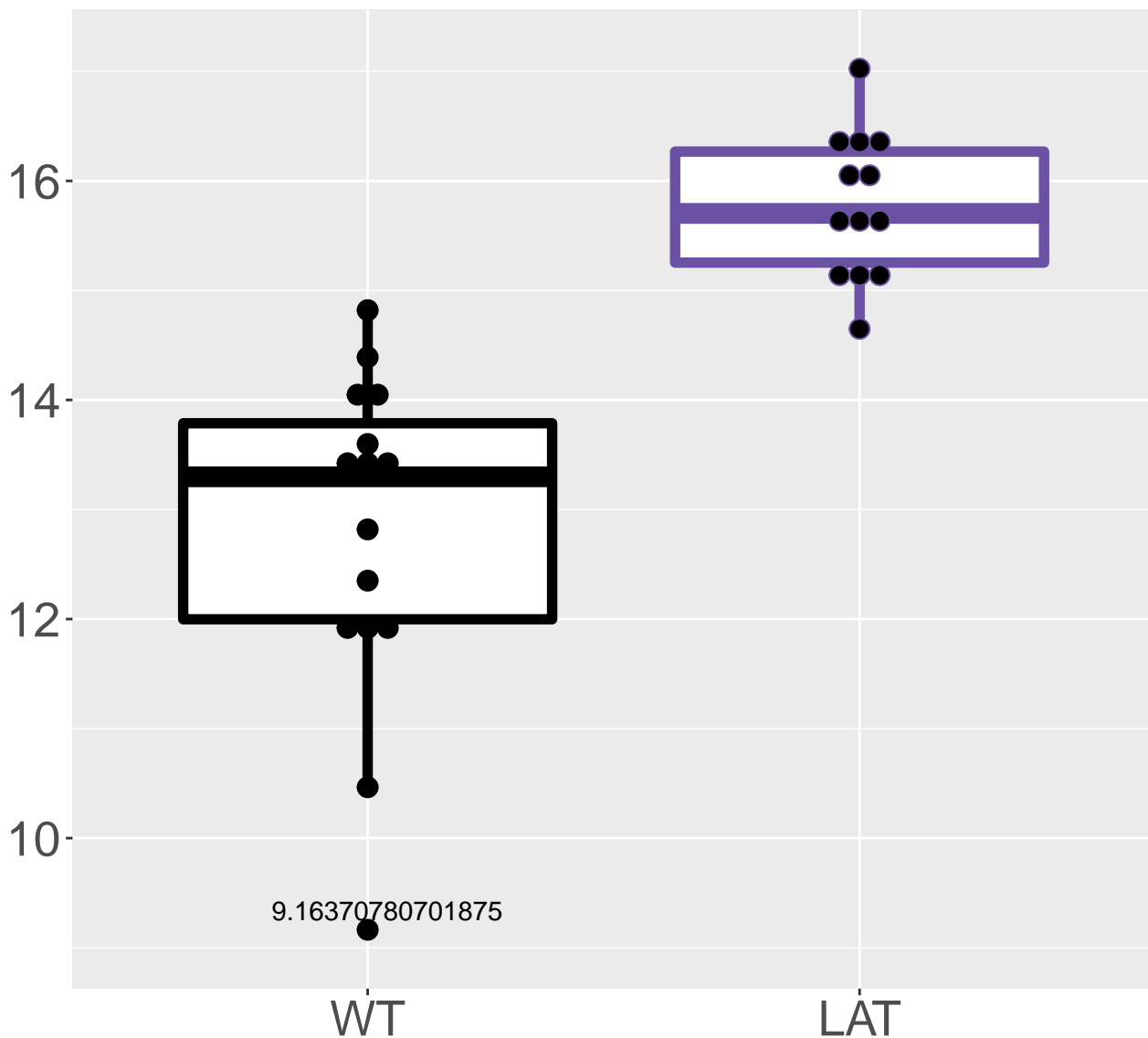


**M439.1412T137.44**

**FDR = 1.8e-05, FC = 8.5**

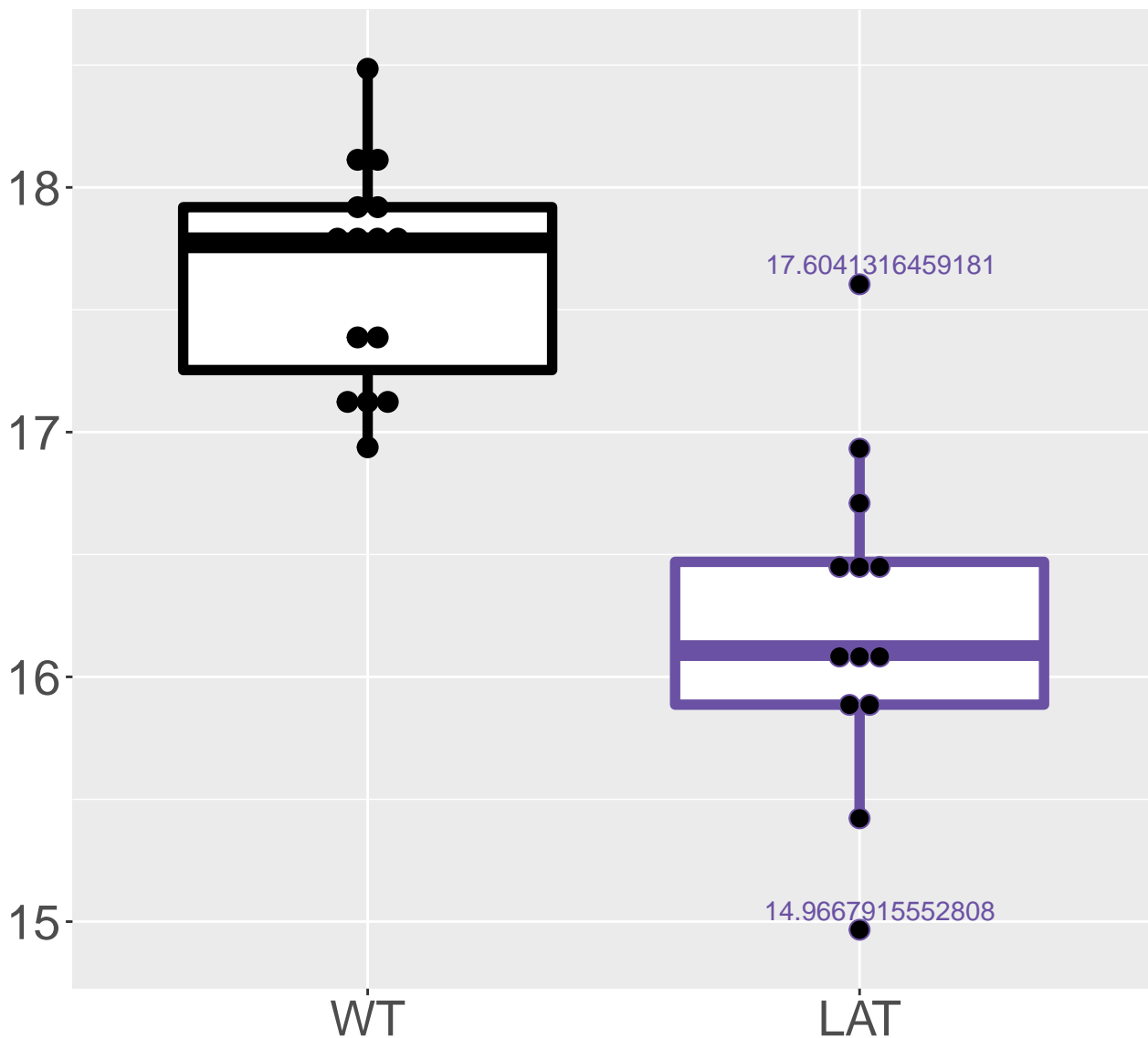


**M398.0532T512.81**  
**FDR = 1.8e-05, FC = 3**



**M698.1322T556.49**

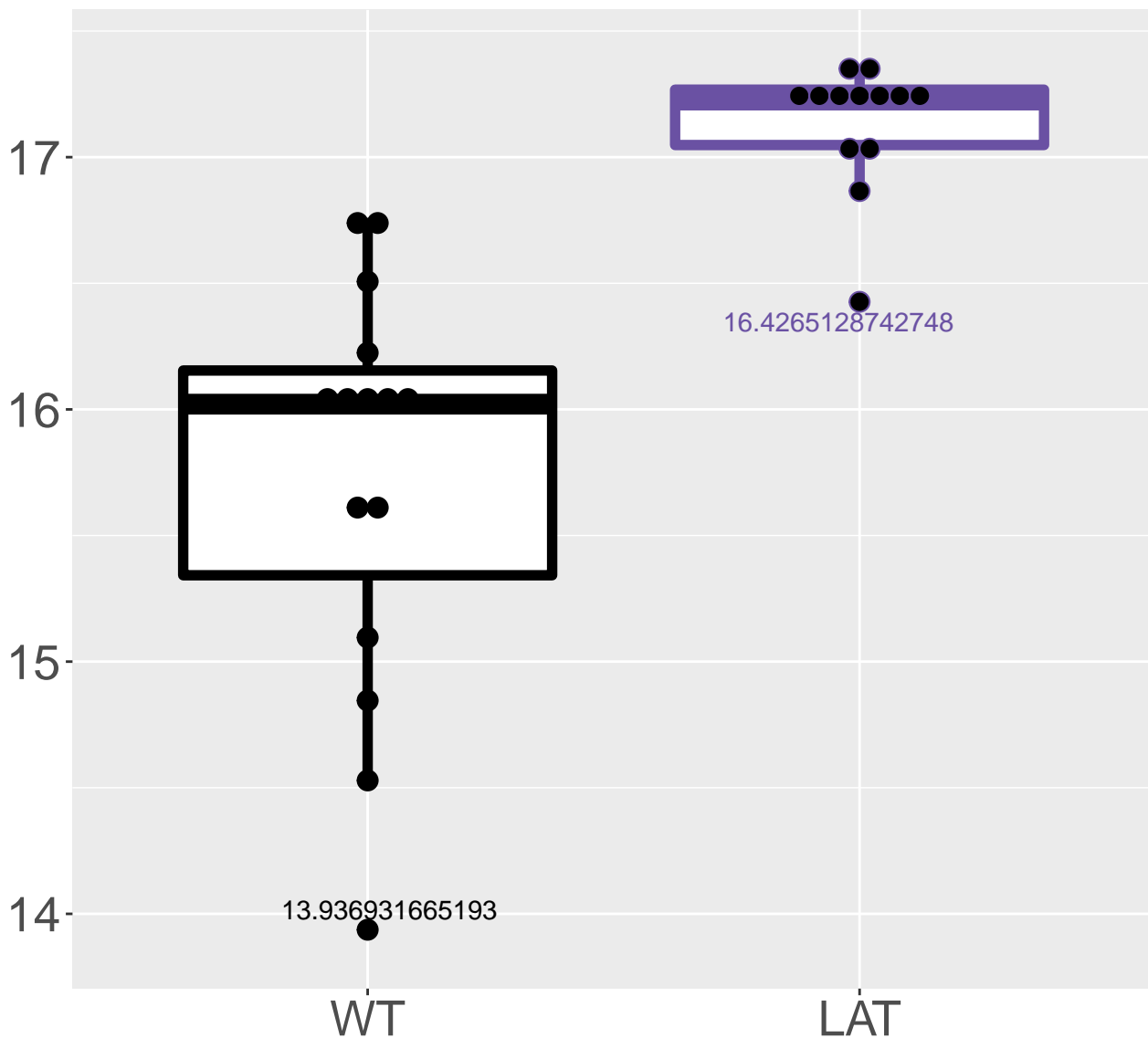
**FDR =  $1.8e-05$ , FC =  $-1.4$**





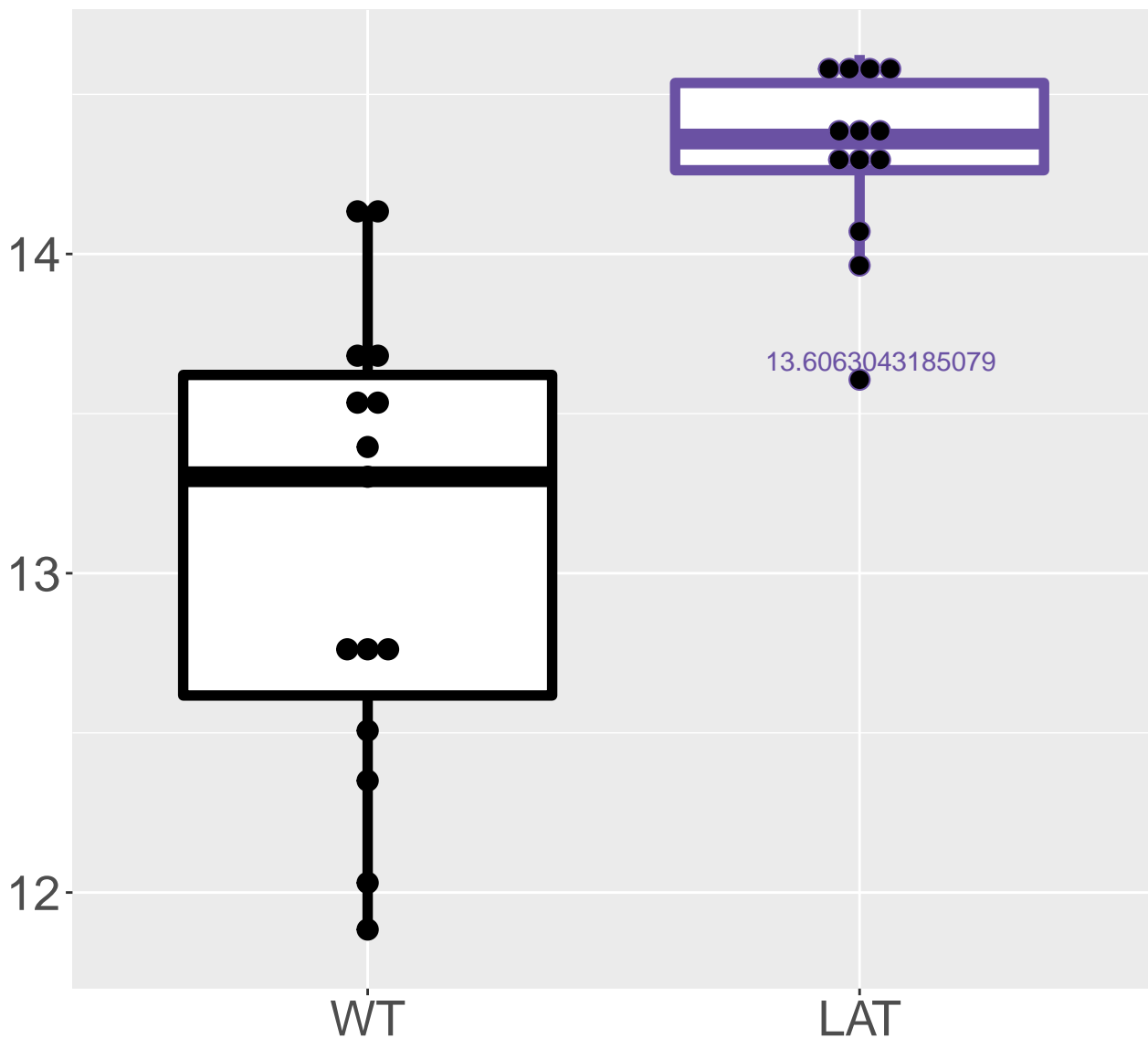
**M802.0286T555.14**

**FDR = 1.8e-05, FC = 1.4**



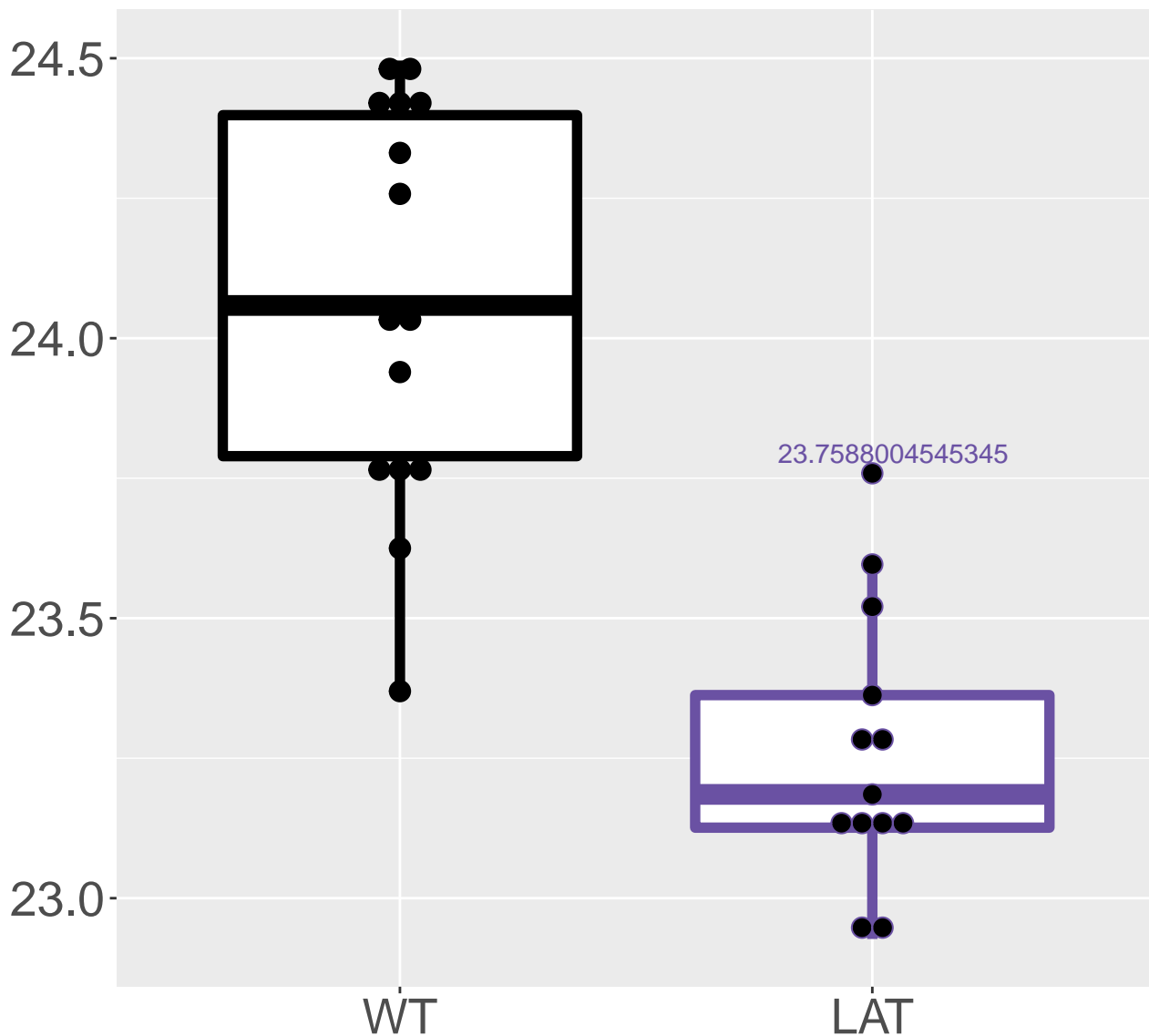
**M304.0227T347.88**

**FDR = 1.8e-05, FC = 1.2**



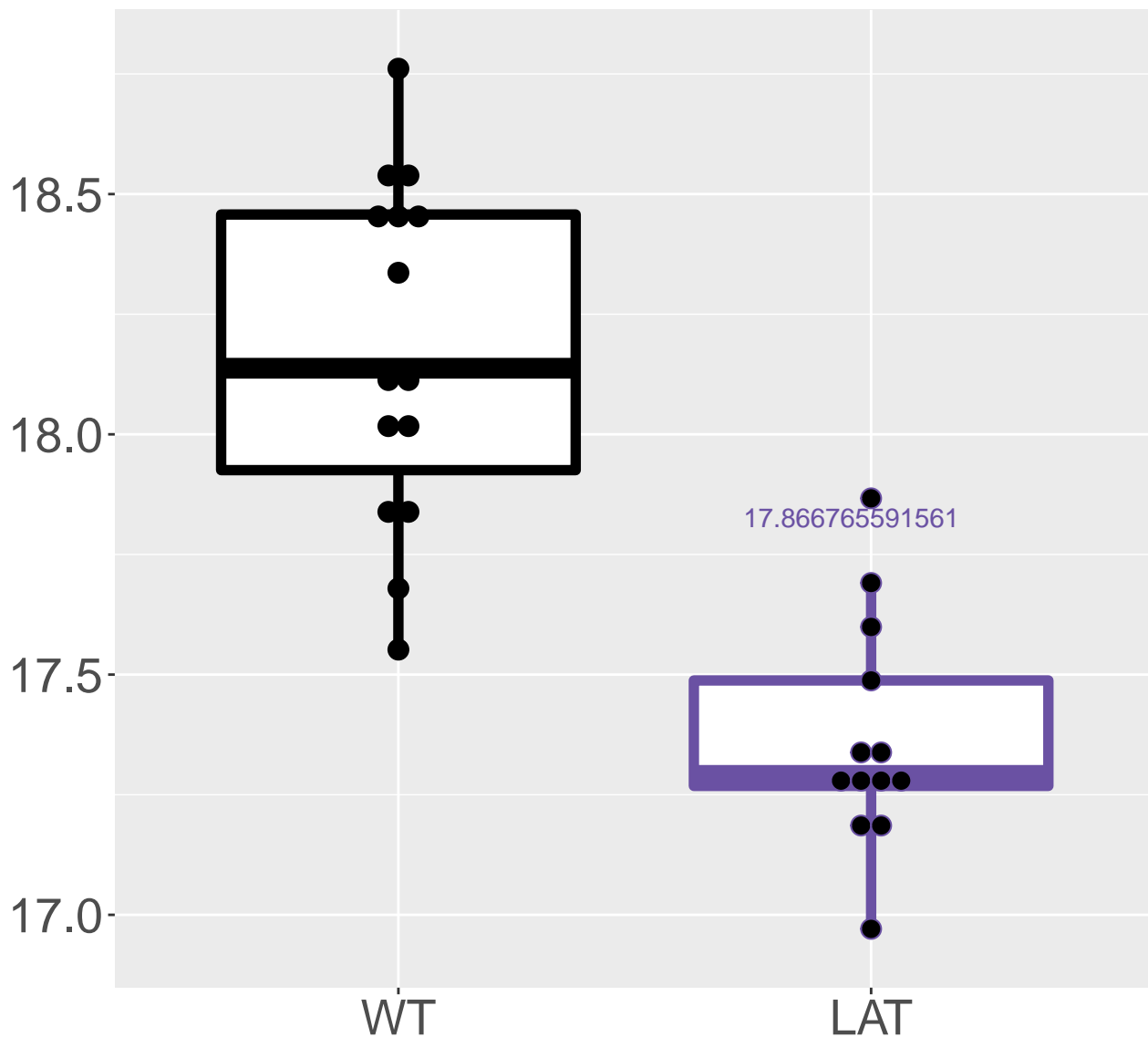
**M827.2695T626.66**

**FDR = 1.8e-05, FC = -0.81**



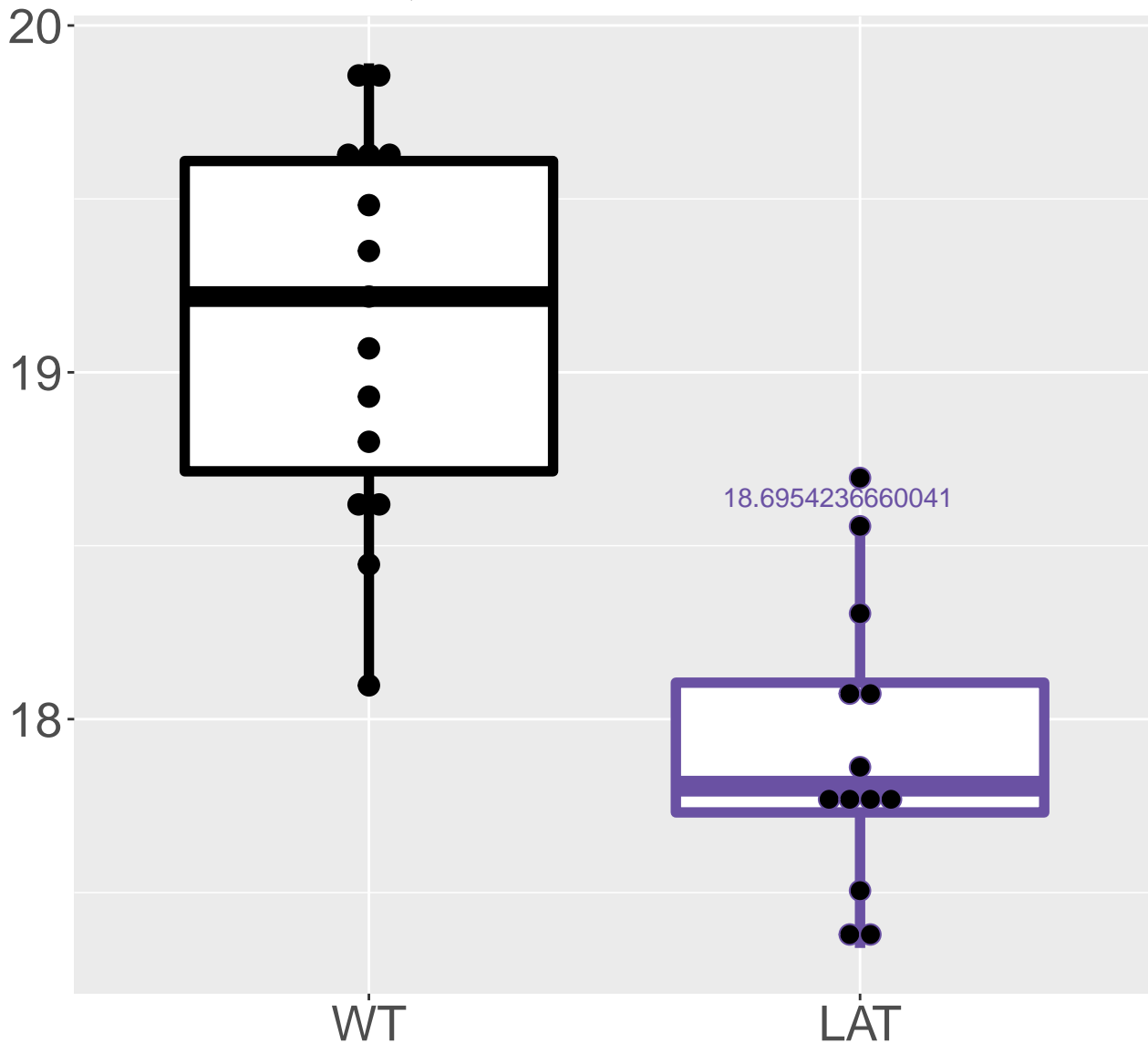
**M830.2763T626.54**

**FDR =  $1.8e-05$ , FC =  $-0.81$**



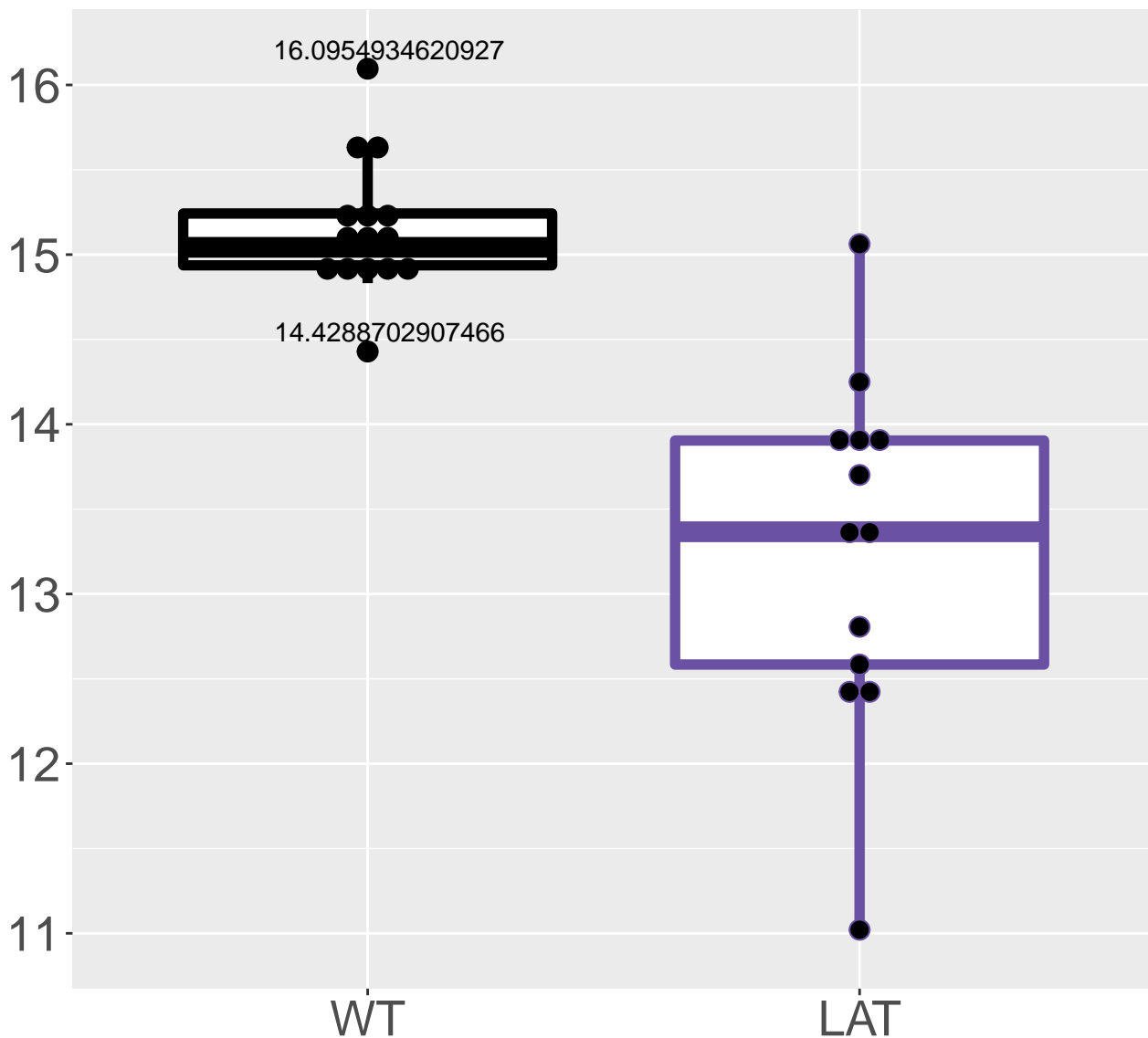
**M443.6391T625.78\_1**

**FDR = 1.9e-05, FC = -1.2**



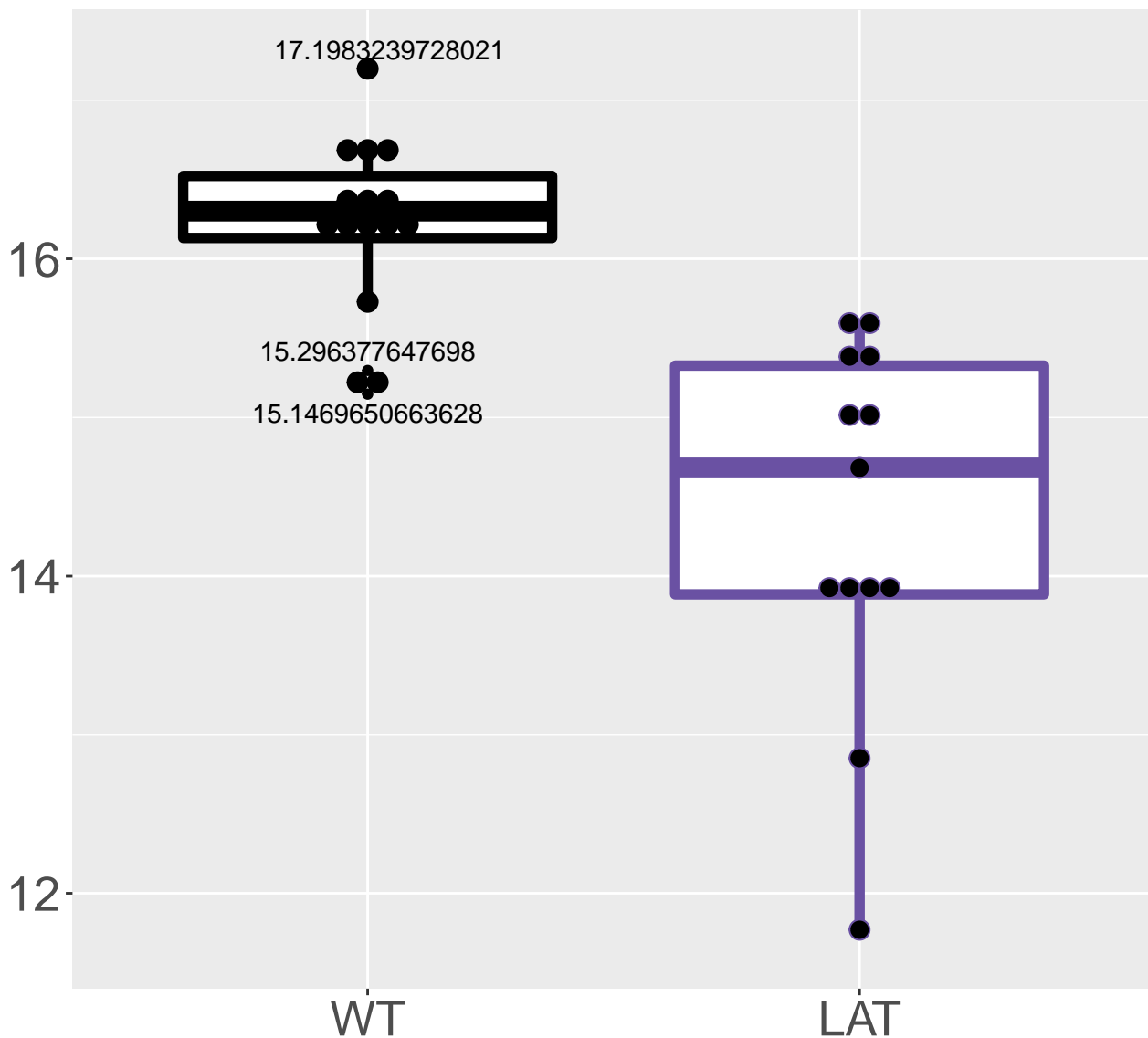
**M543.2523T518.04**

**FDR = 1.9e-05, FC = -1.9**



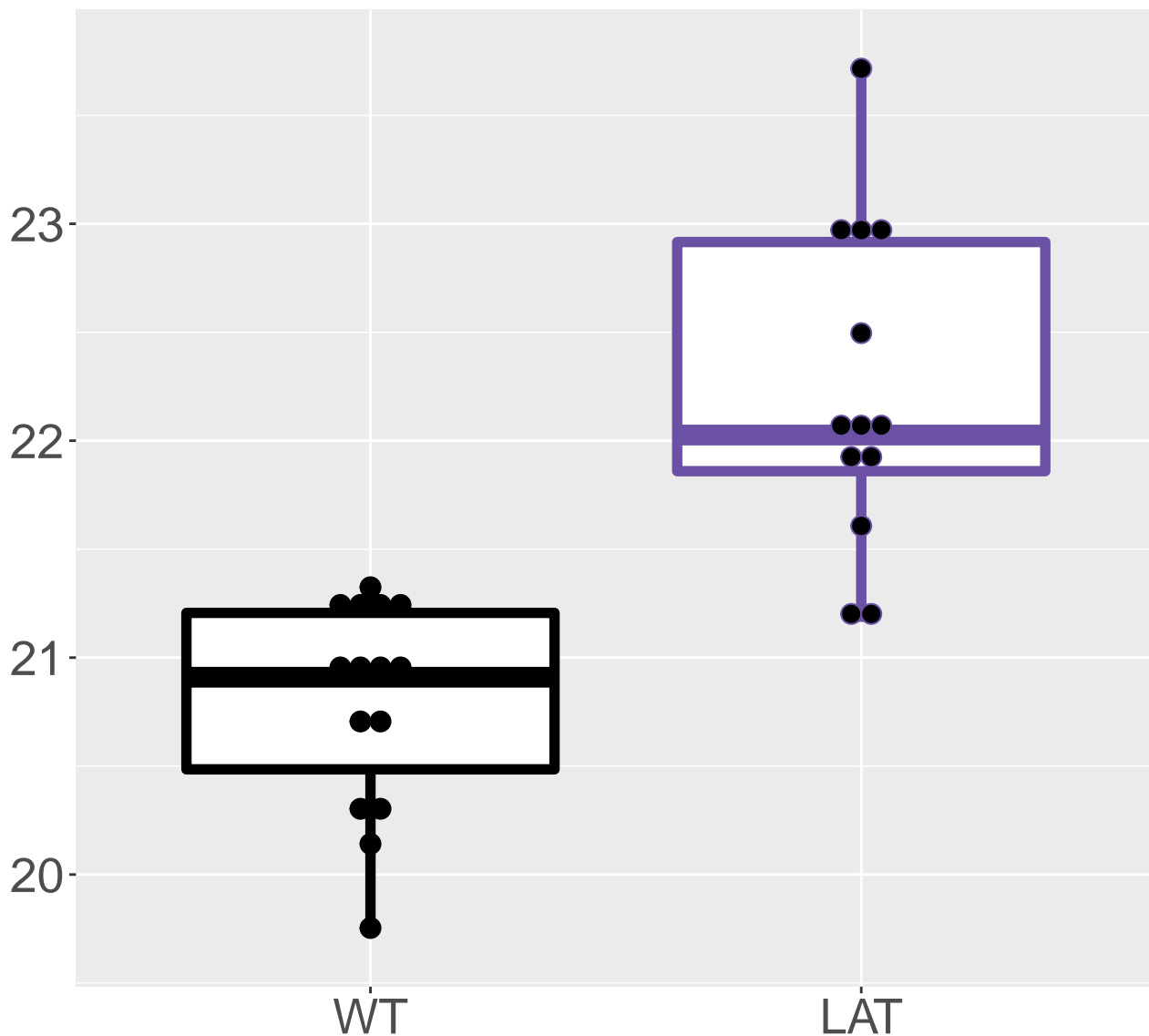
**M316.1054T325.73**

**FDR = 1.9e-05, FC = -1.9, sex\***



# N-Acetyl-L-methionine

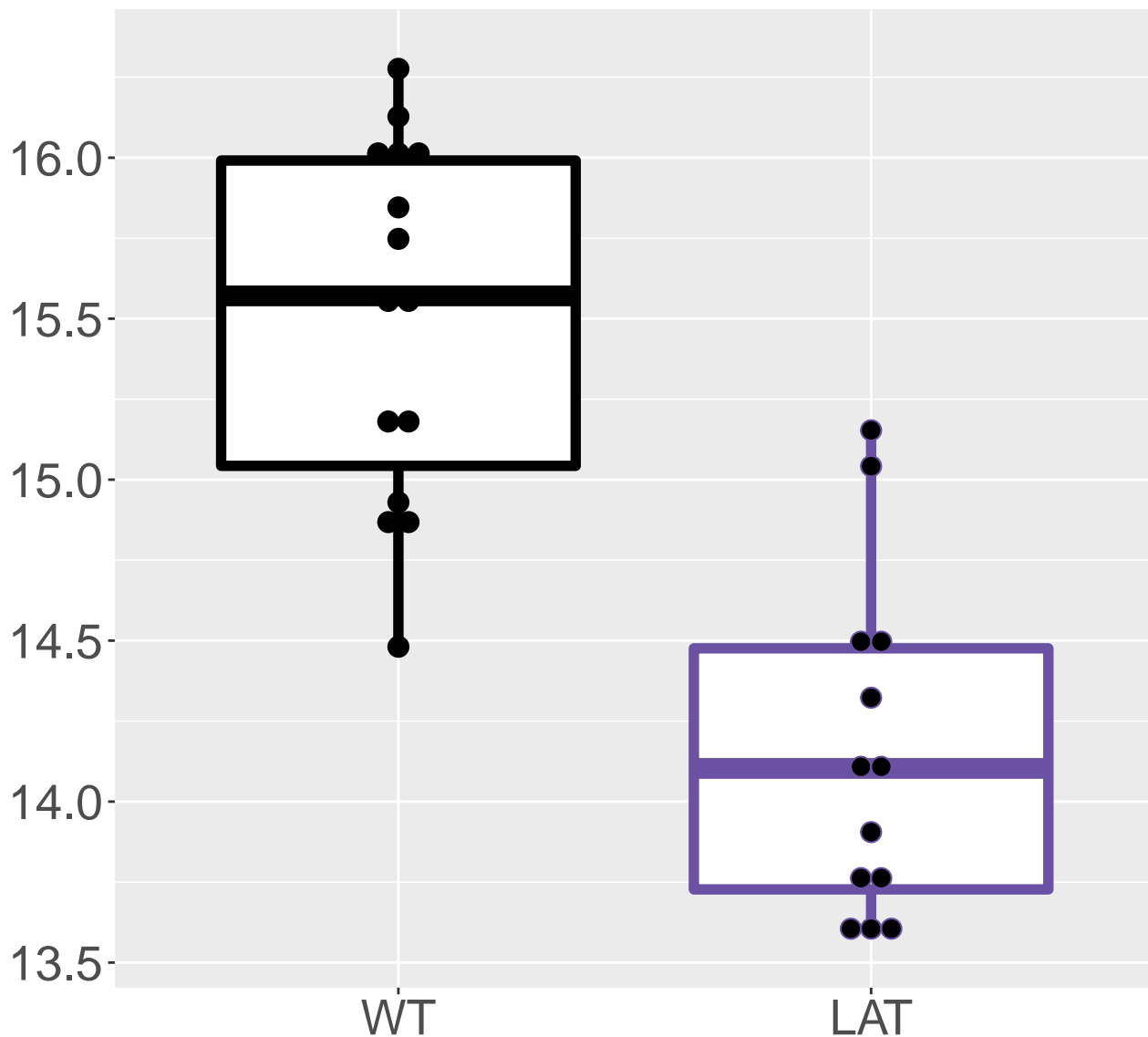
FDR = 1.9e-05, FC = 1.4





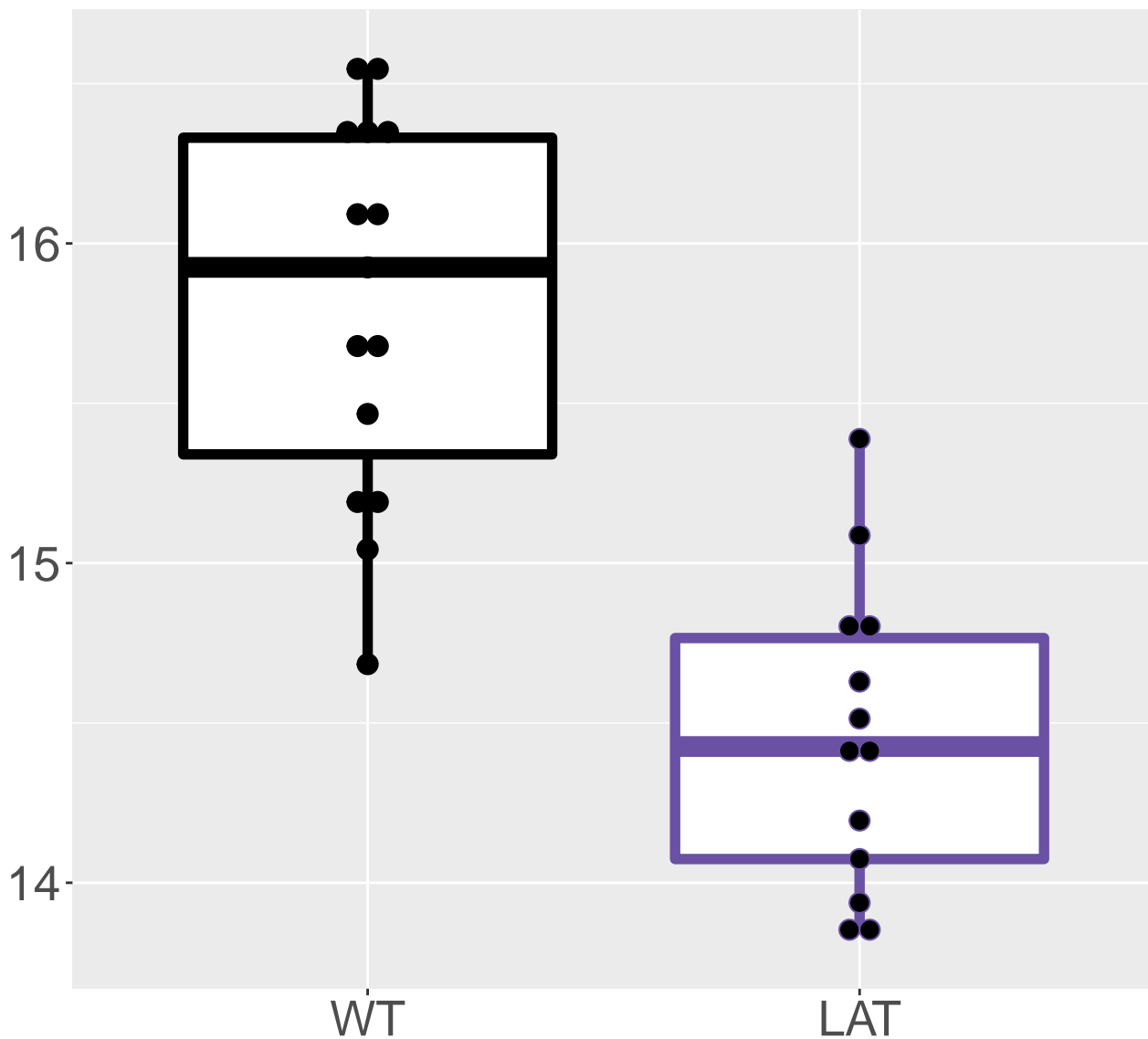
**M374.1148T626.32**

**FDR = 1.9e-05, FC = -1.4**



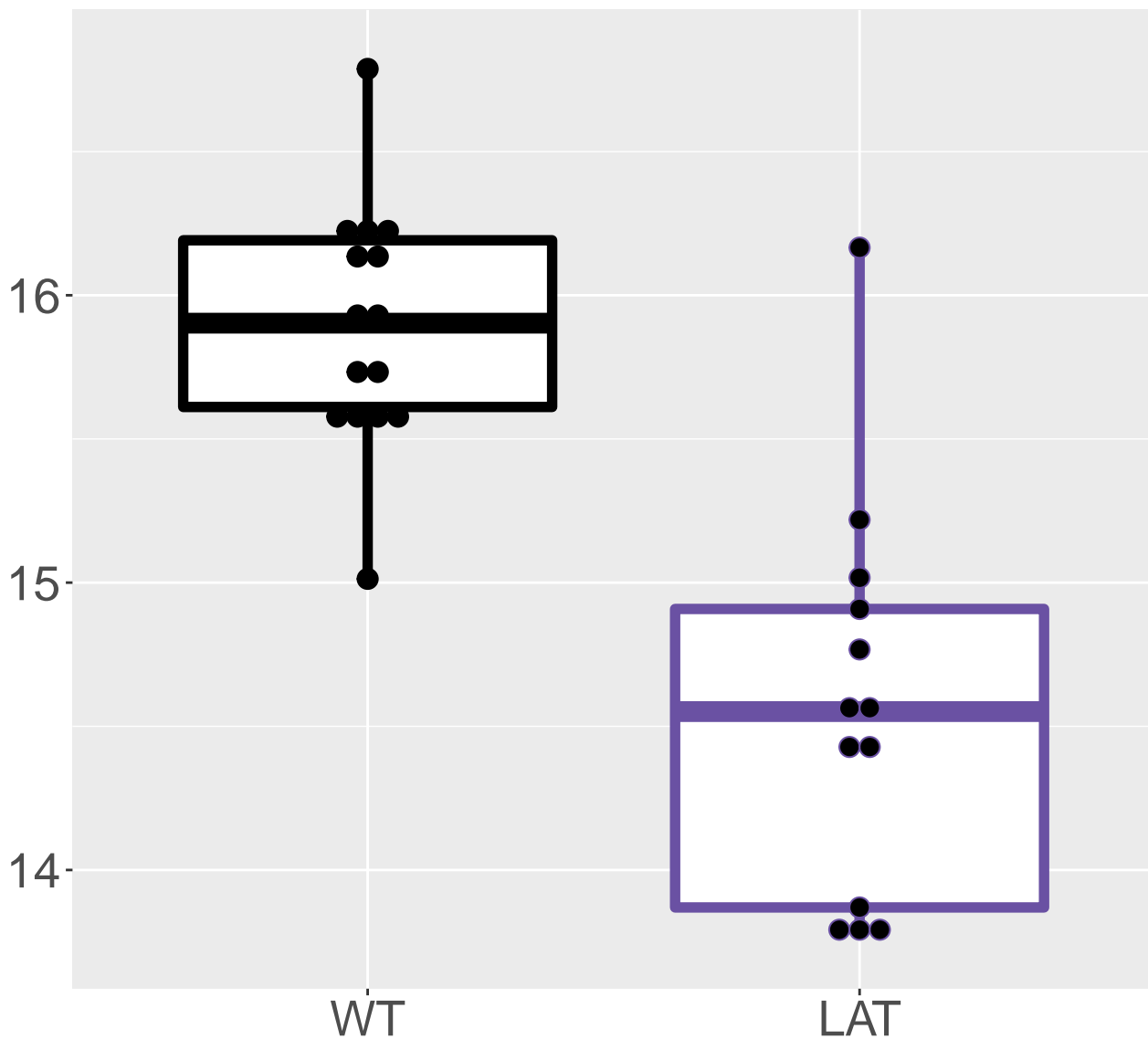
**M444.642T625.75**

**FDR =  $1.9\text{e-}05$ , FC =  $-1.4$**



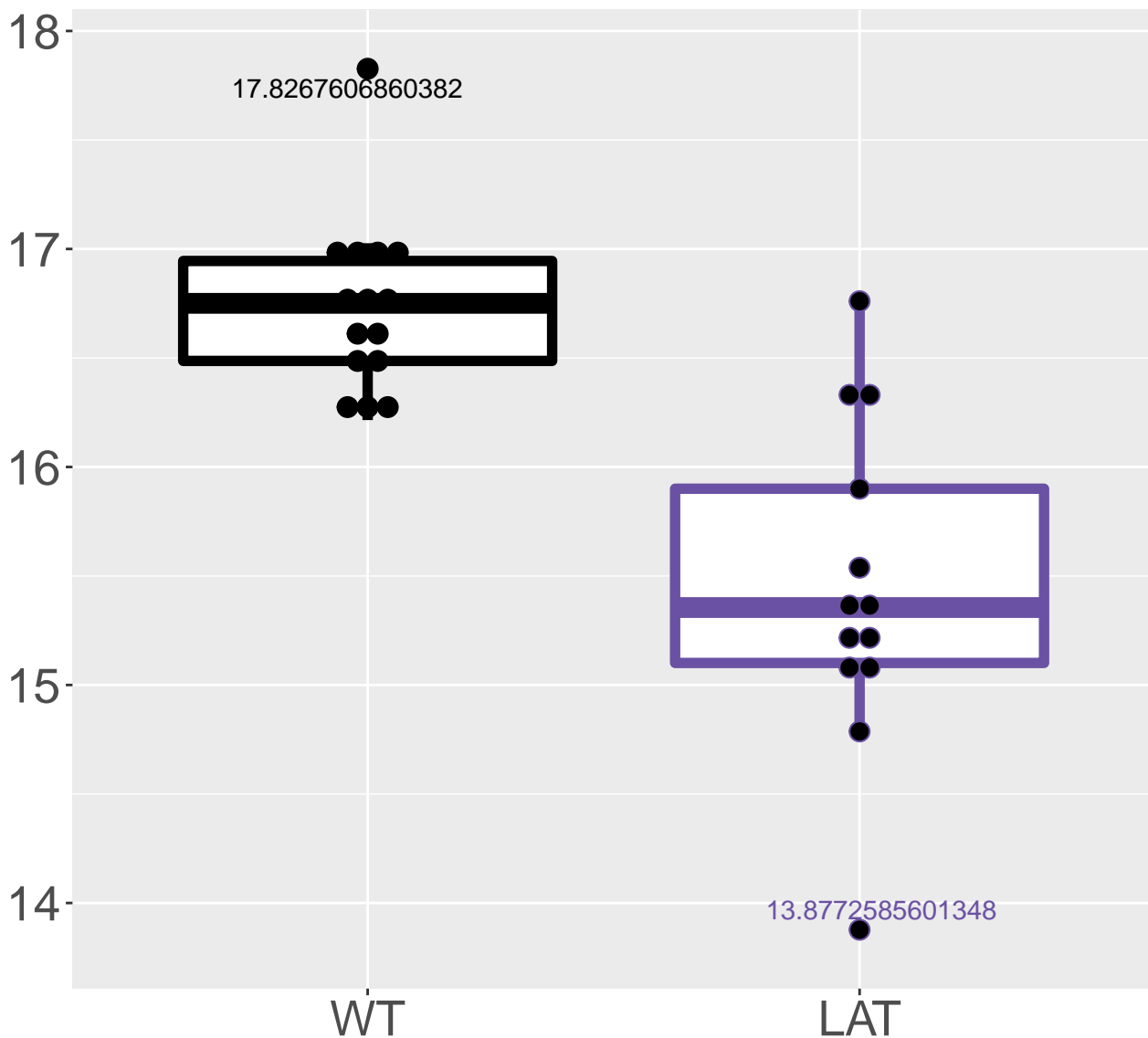
**M793.3105T632.63**

**FDR =  $1.9\text{e-}05$ , FC =  $-1.3$**



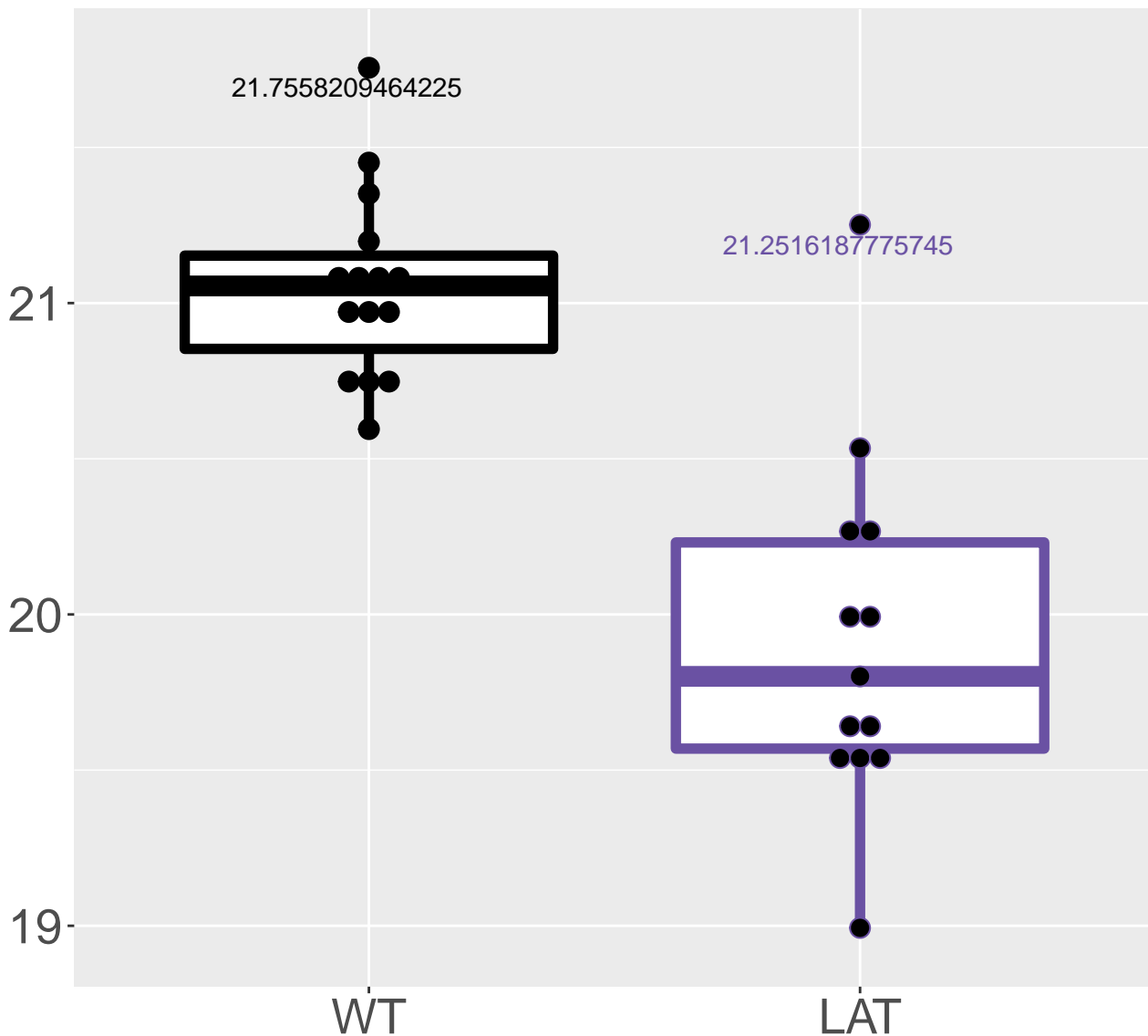
**M105.9203T142.09**

**FDR = 1.9e-05, FC = -1.3**



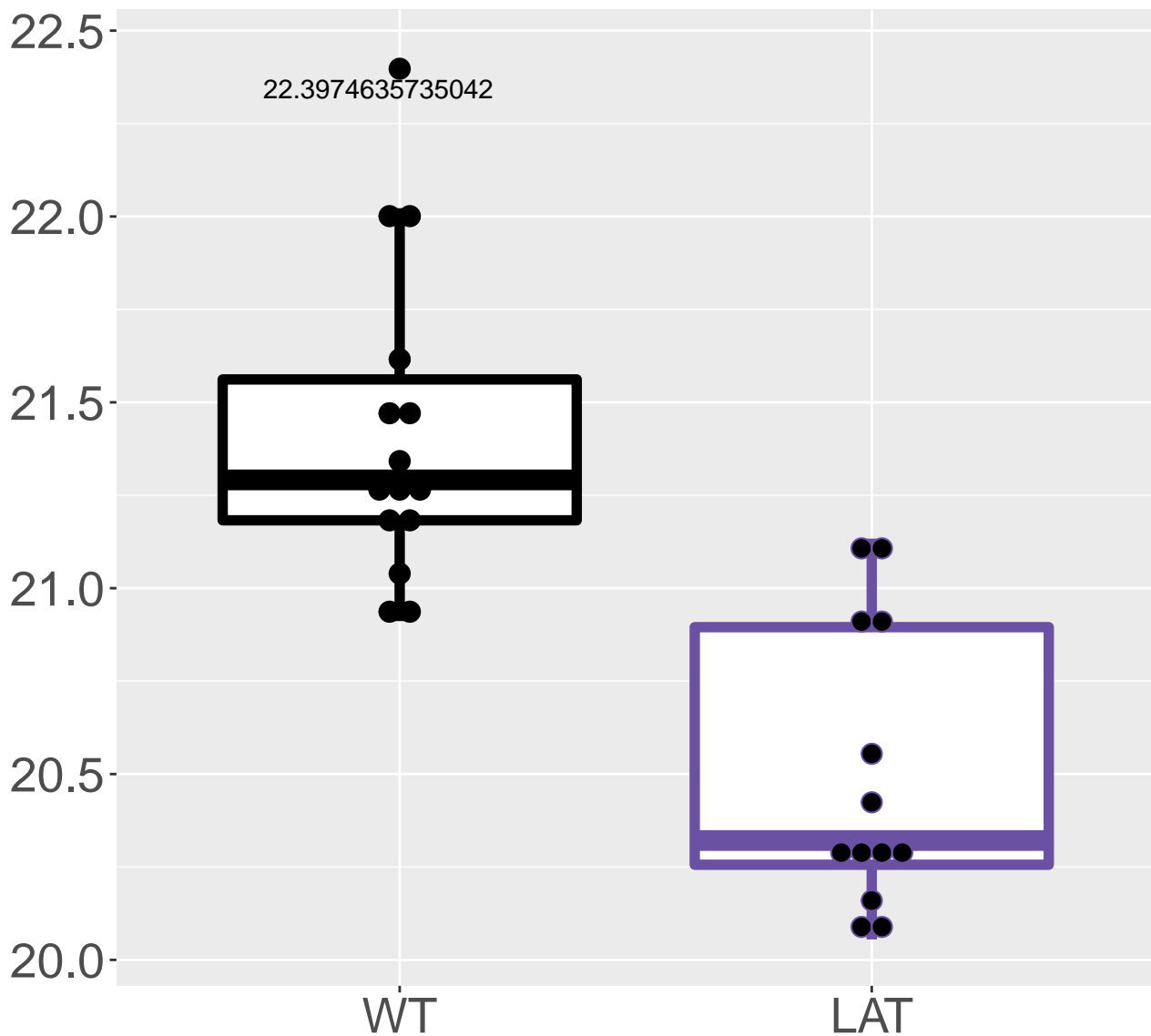
**M340.1253T512.25**

**FDR = 1.9e-05, FC = -1.1**



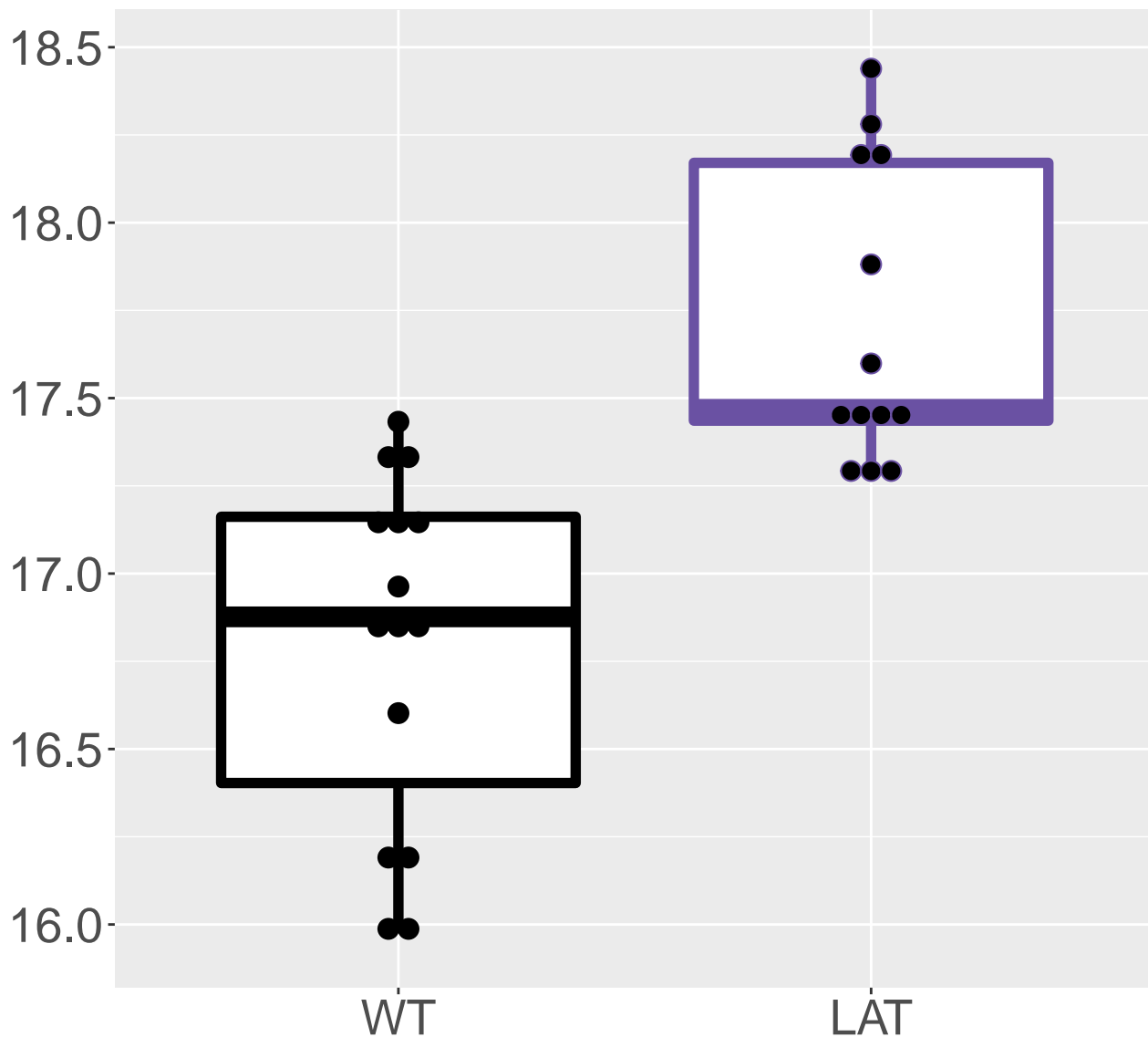
**M219.1069T206.02**

**FDR =  $1.9e-05$ , FC =  $-0.92$**



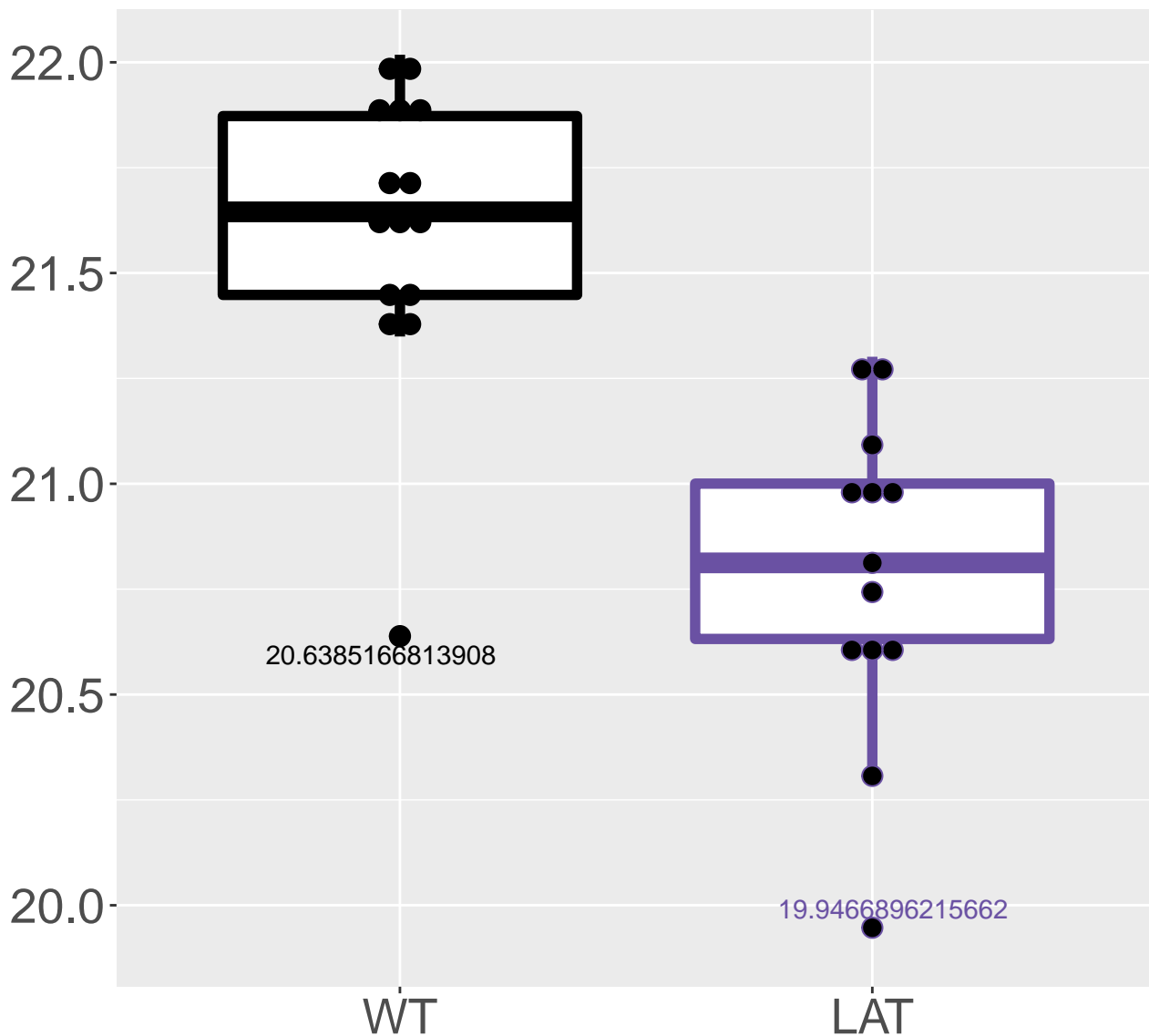
**M318.0615T380.97**

**FDR = 1.9e-05, FC = 0.92, sex\*\***



**M266.0885T499.76**

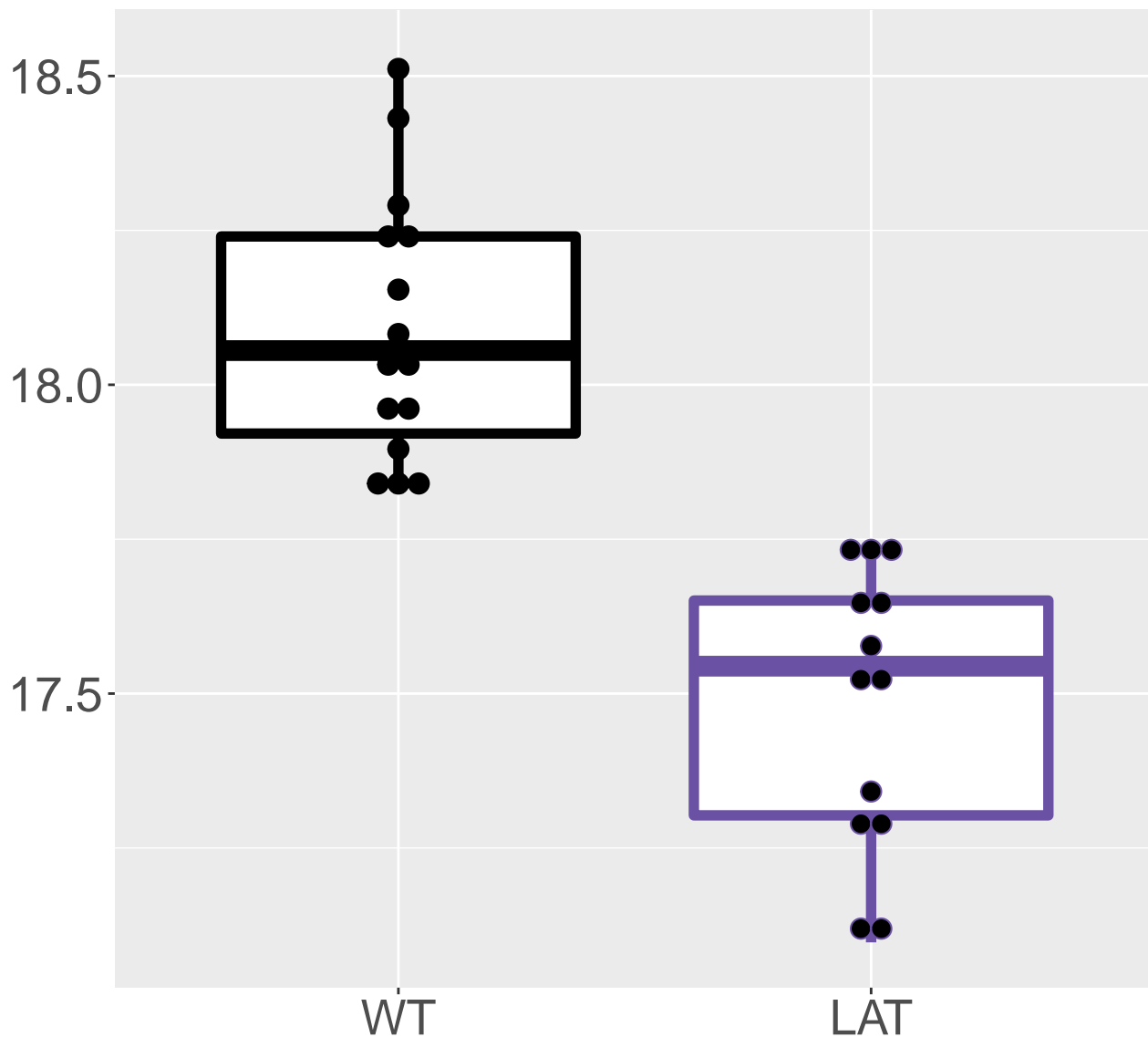
**FDR = 1.9e-05, FC = -0.83**





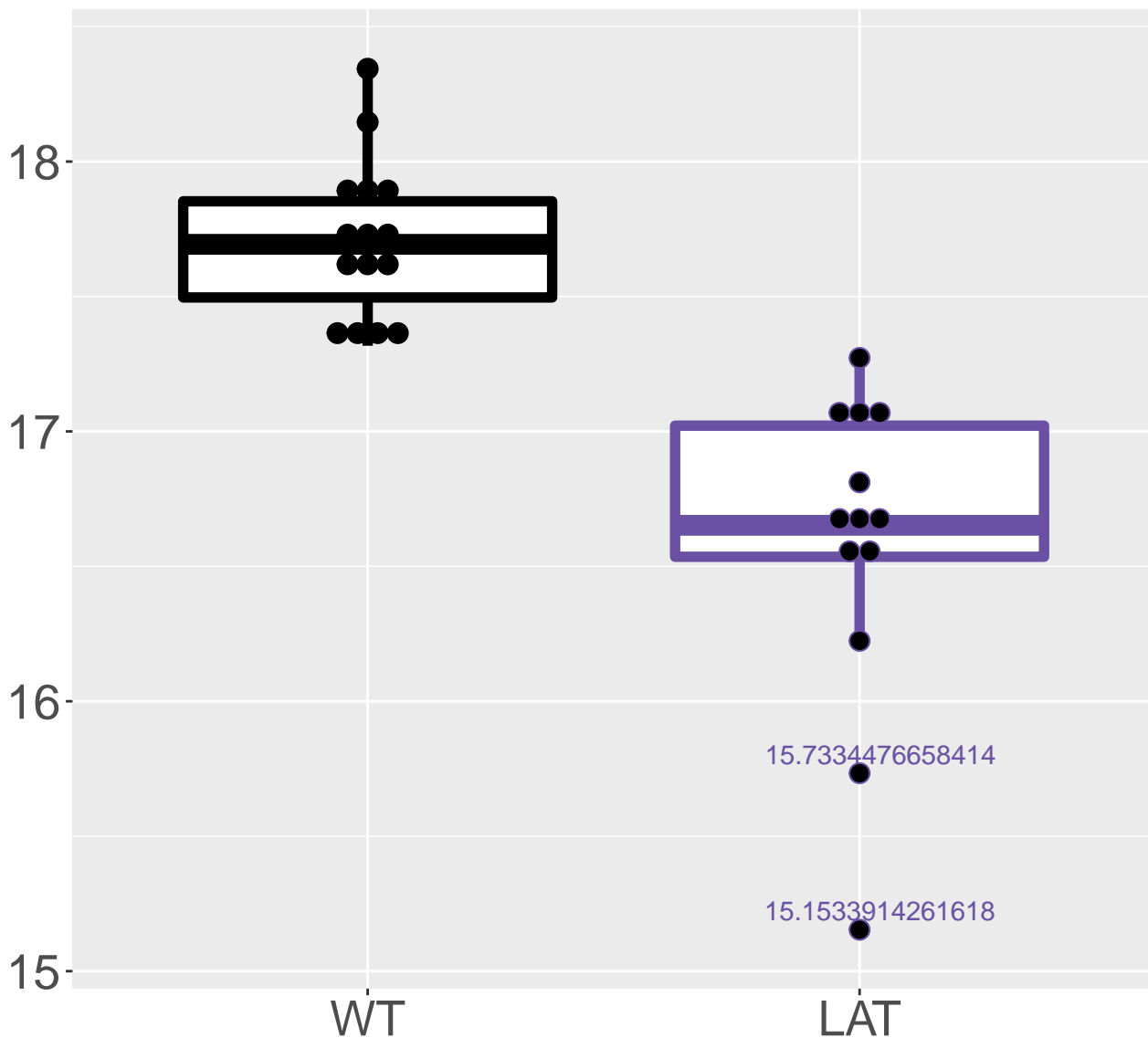
**M289.0682T583.19**

**FDR =  $1.9\text{e-}05$ , FC =  $-0.61$**



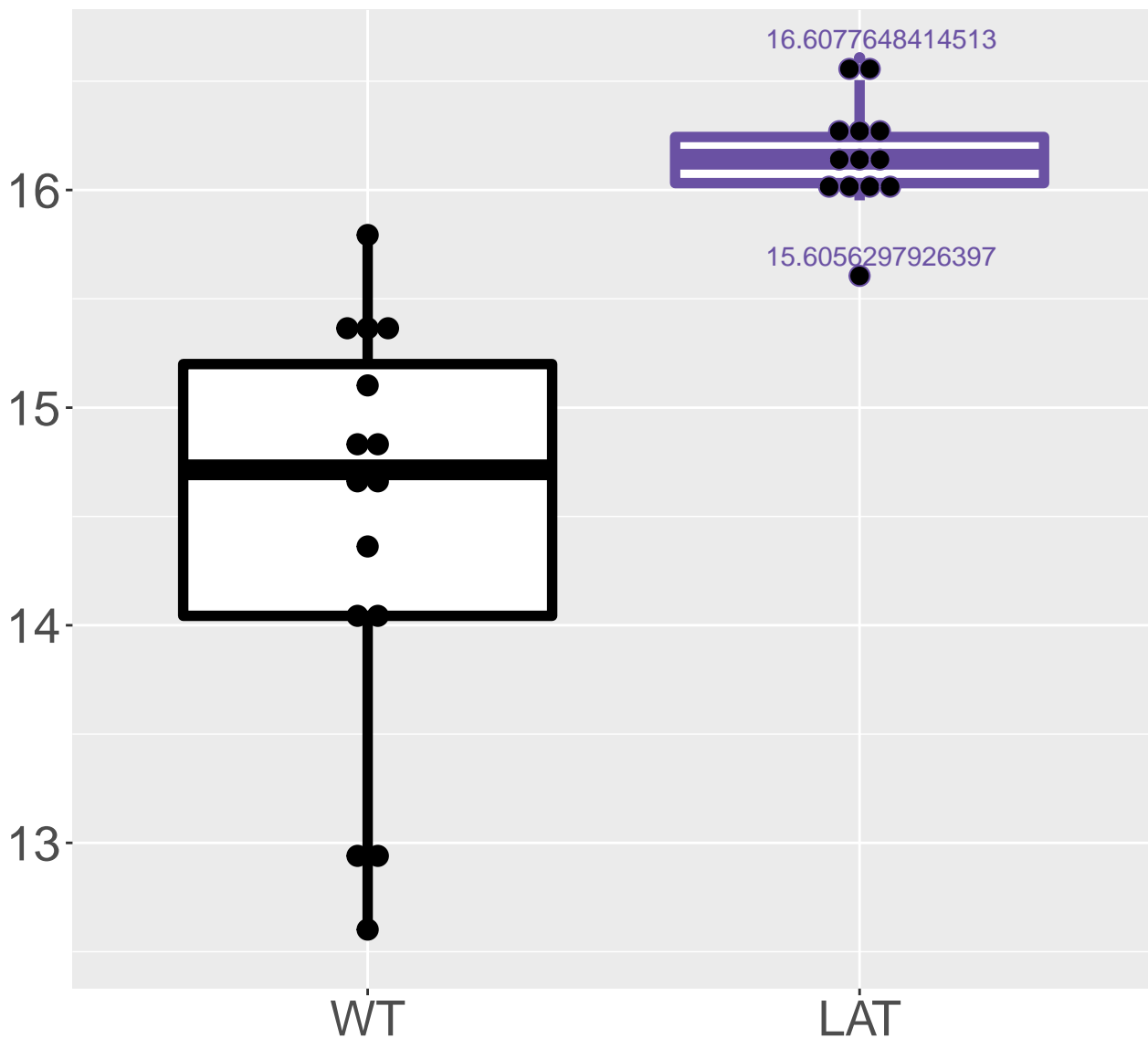
**M398.131T535.9**

**FDR = 1.9e-05, FC = -1.1**



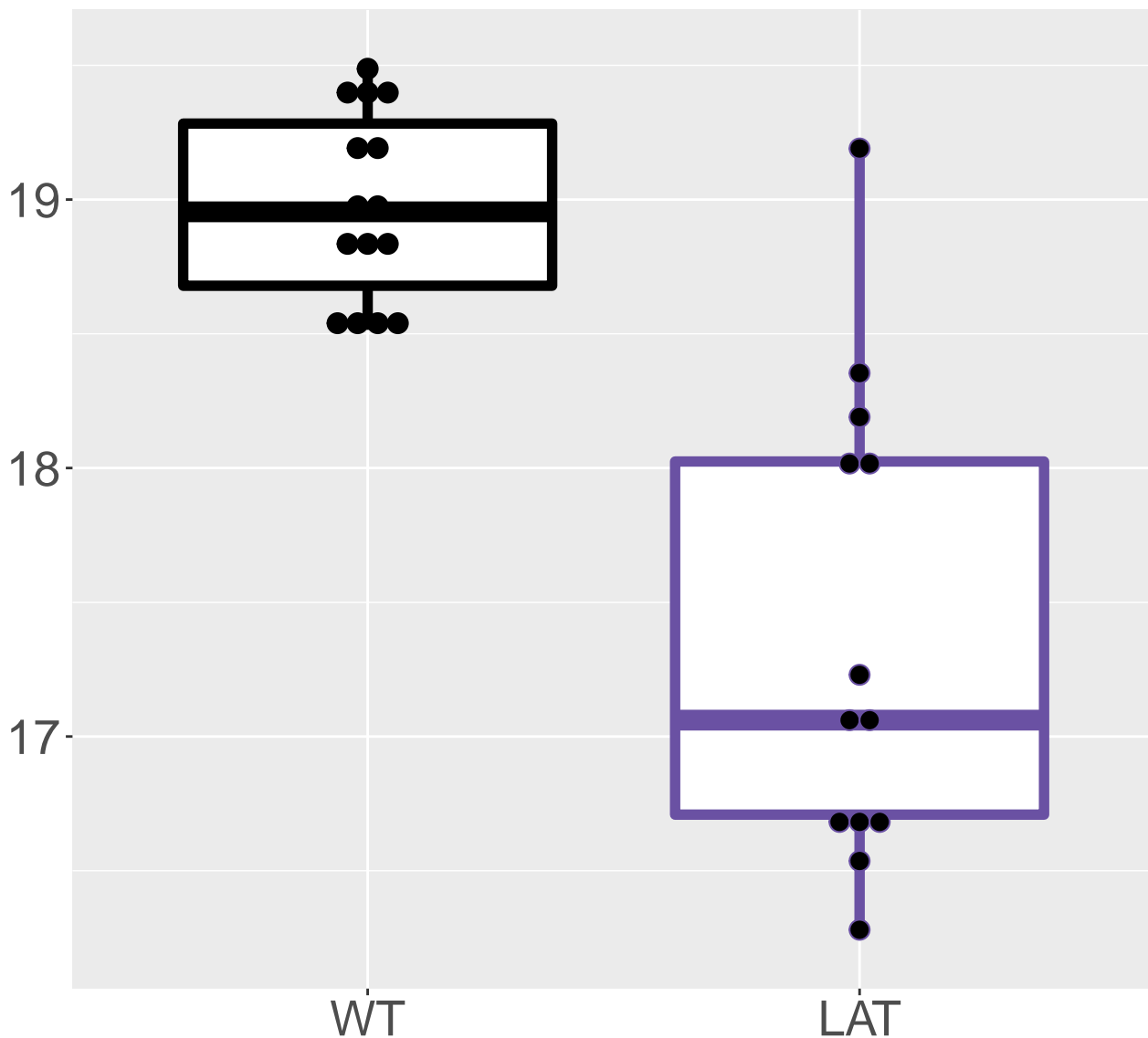
**M705.0556T556.23**

**FDR = 2.1e-05, FC = 1.7**



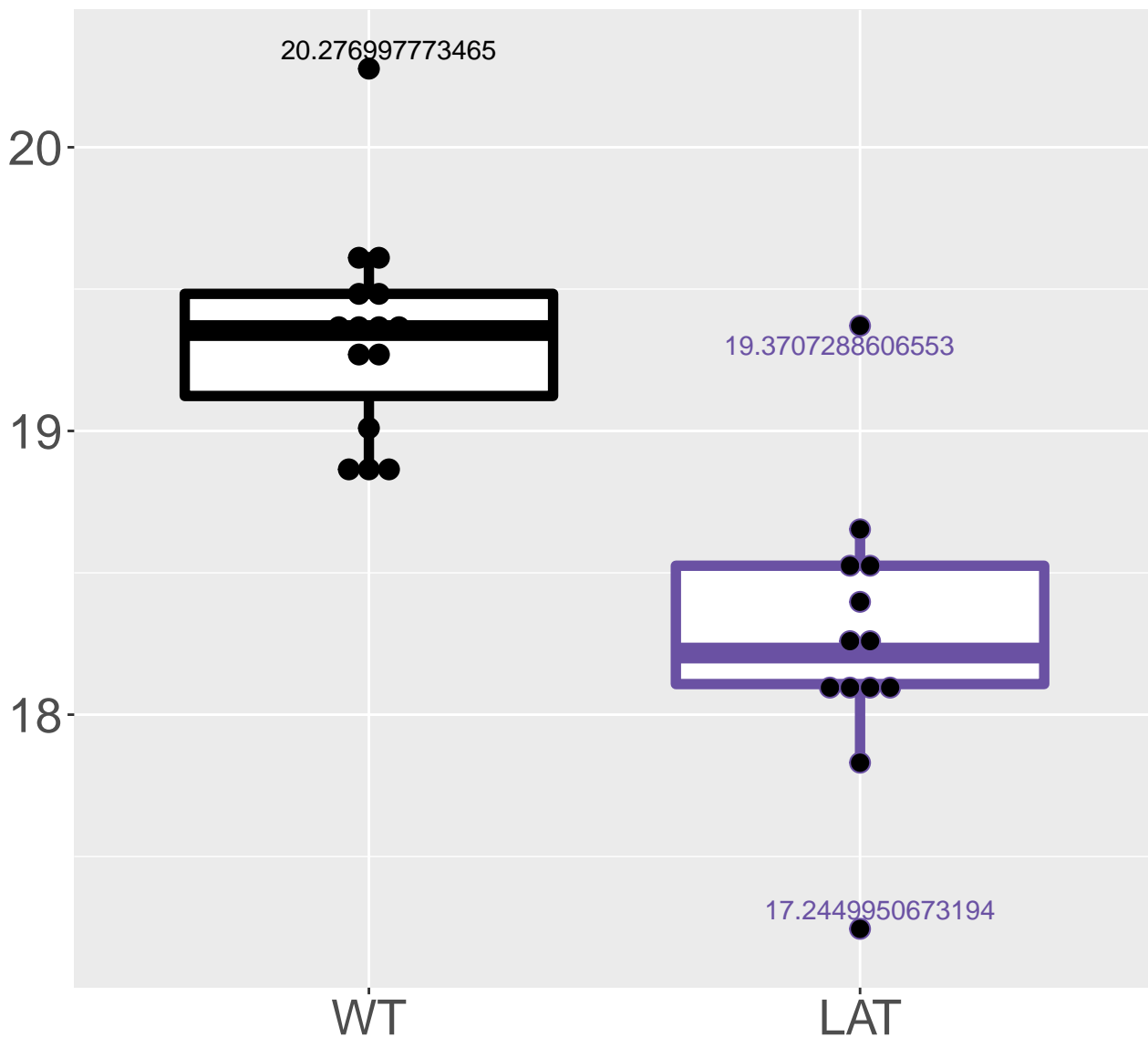
**M454.1937T358.76**

**FDR =  $2.1\text{e-}05$ , FC =  $-1.6$**



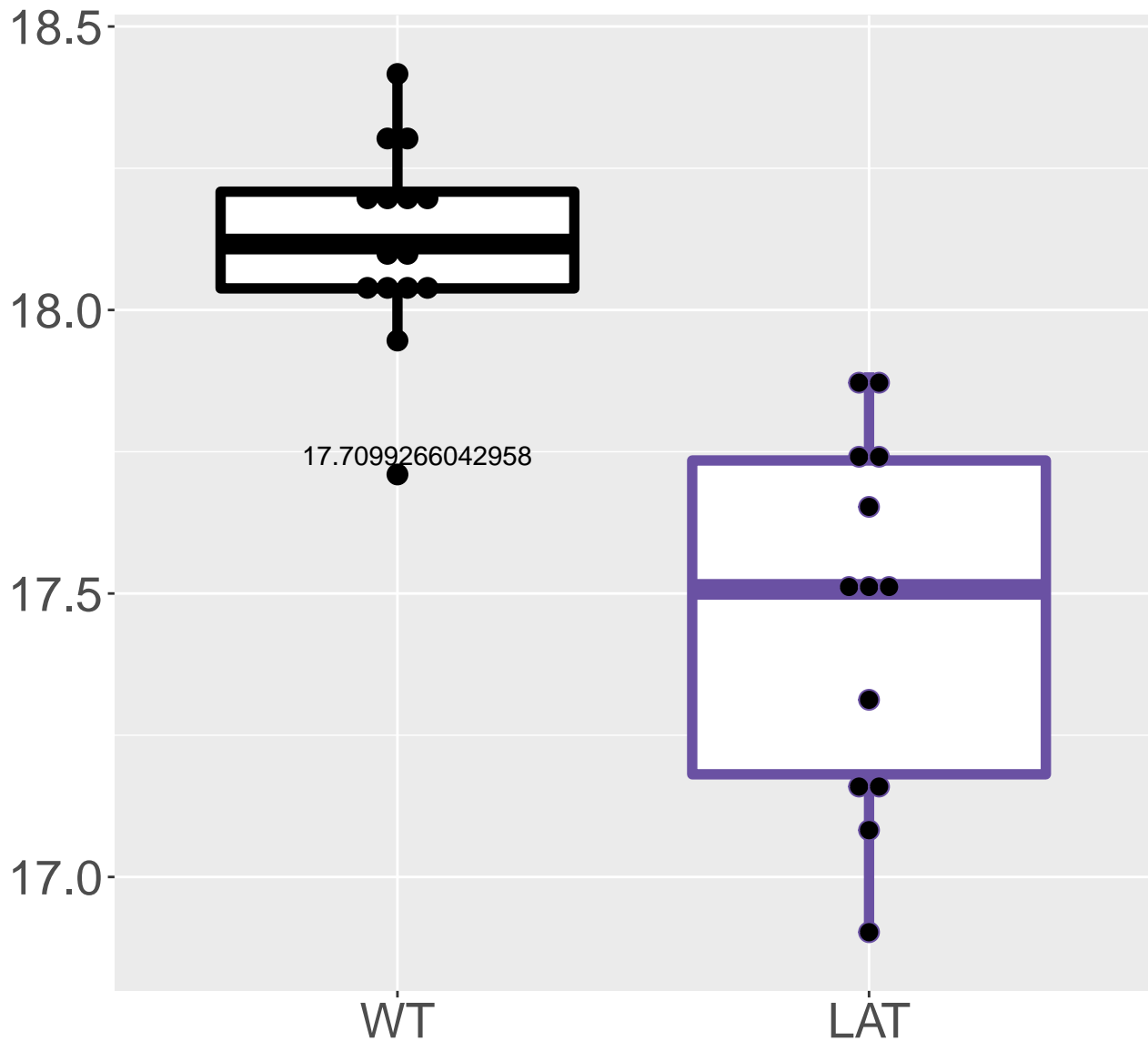
**M412.1466T510.89**

**FDR =  $2.1\text{e-}05$ , FC = -1.1**



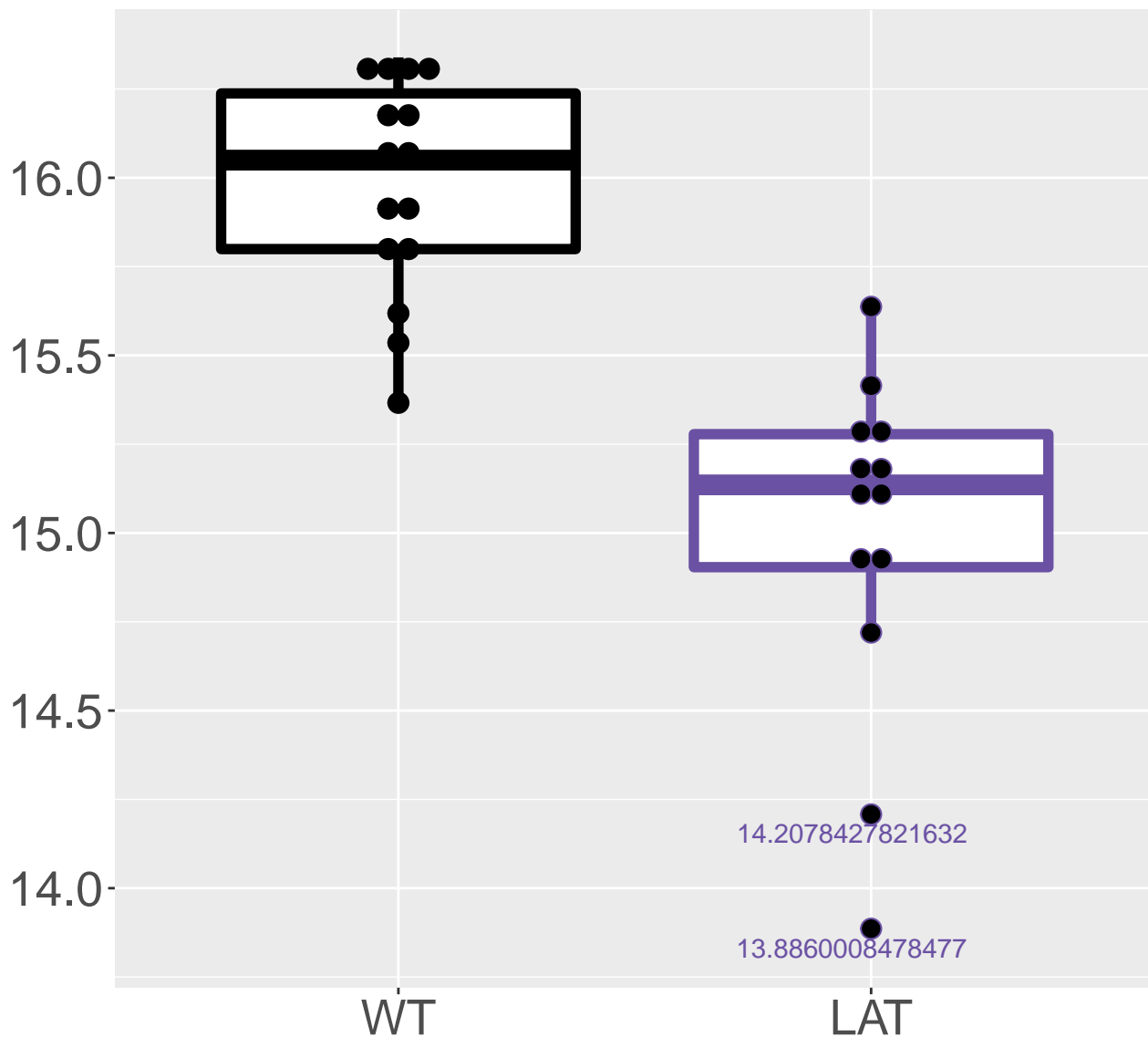
**M623.1684T578.02**

**FDR =  $2.3e-05$ , FC =  $-0.66$**



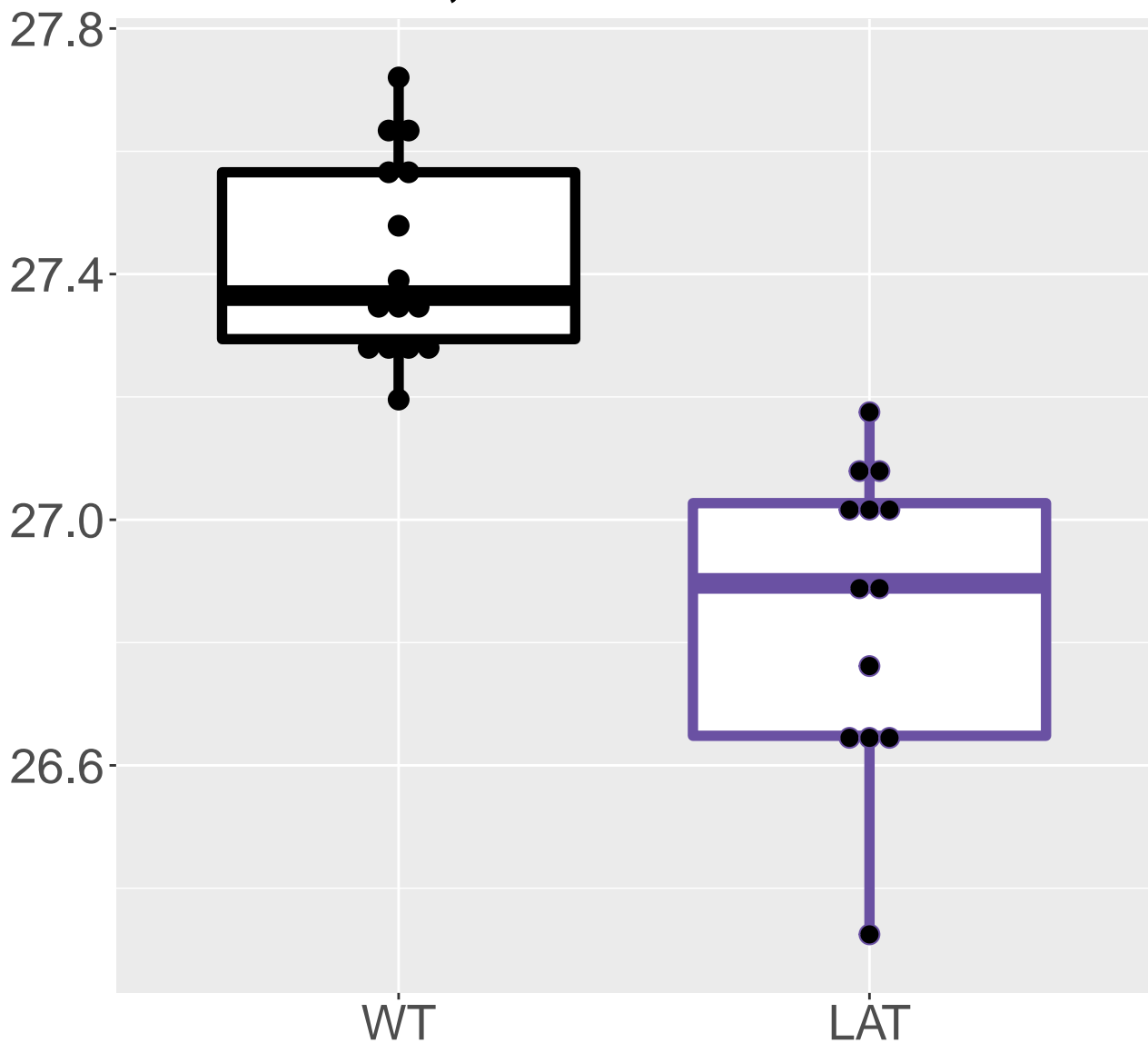
**M876.7579T626.89\_1**

**FDR =  $2.4e-05$ , FC =  $-0.99$**



**M303.2332T77.54**

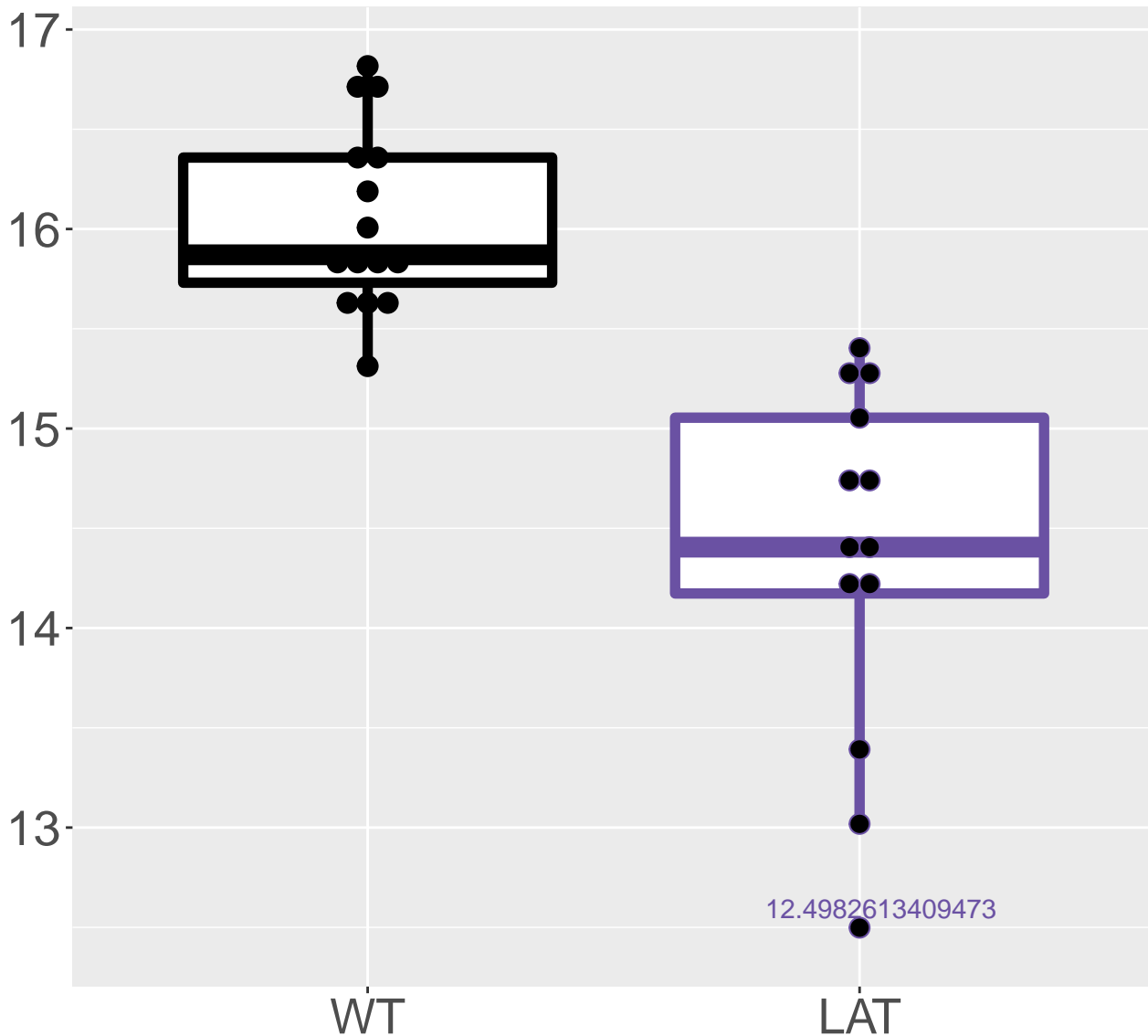
**FDR =  $2.4e-05$ , FC =  $-0.56$**



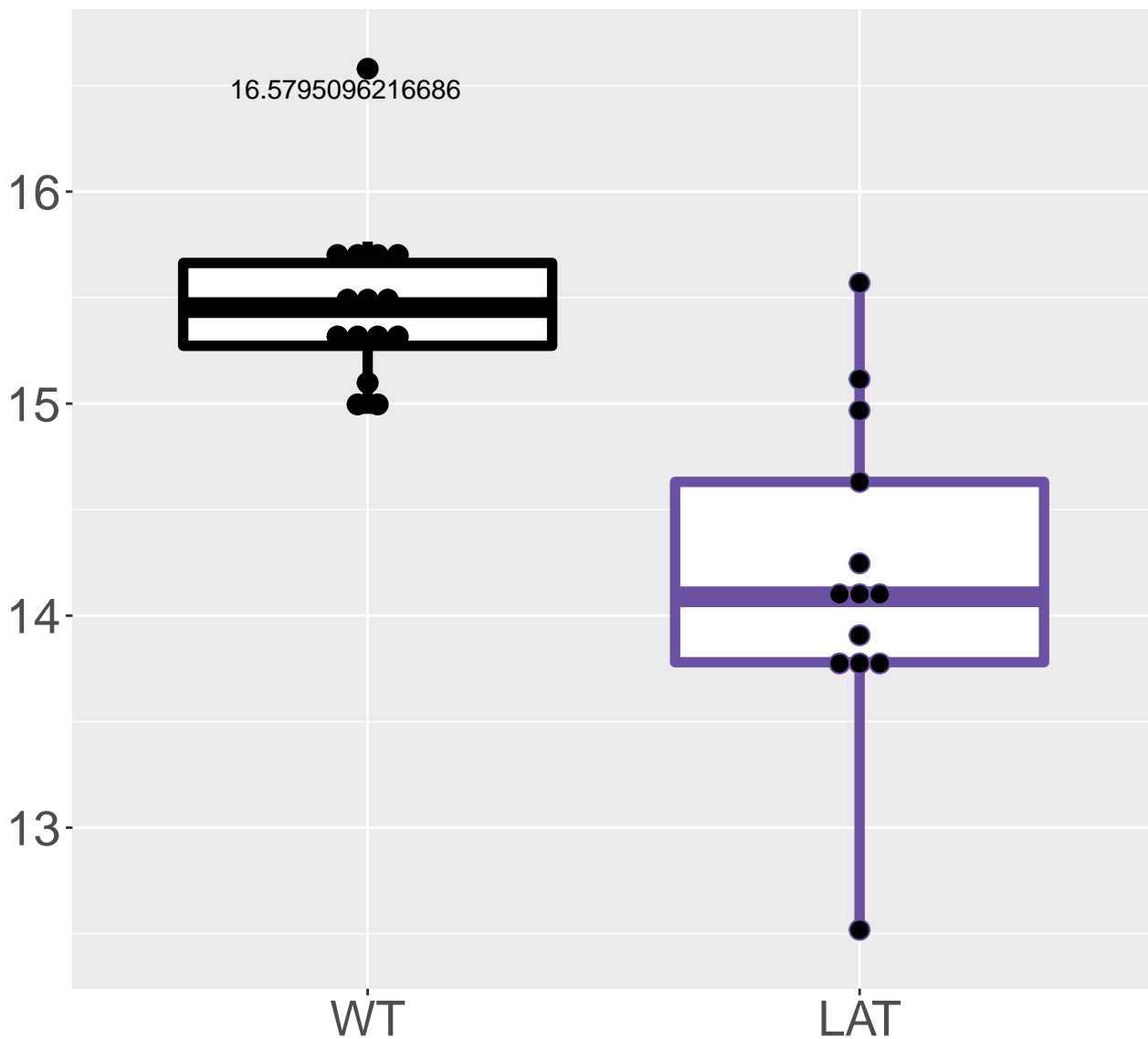


**M812.2682T565.34**

**FDR =  $2.4e-05$ , FC =  $-1.7$**

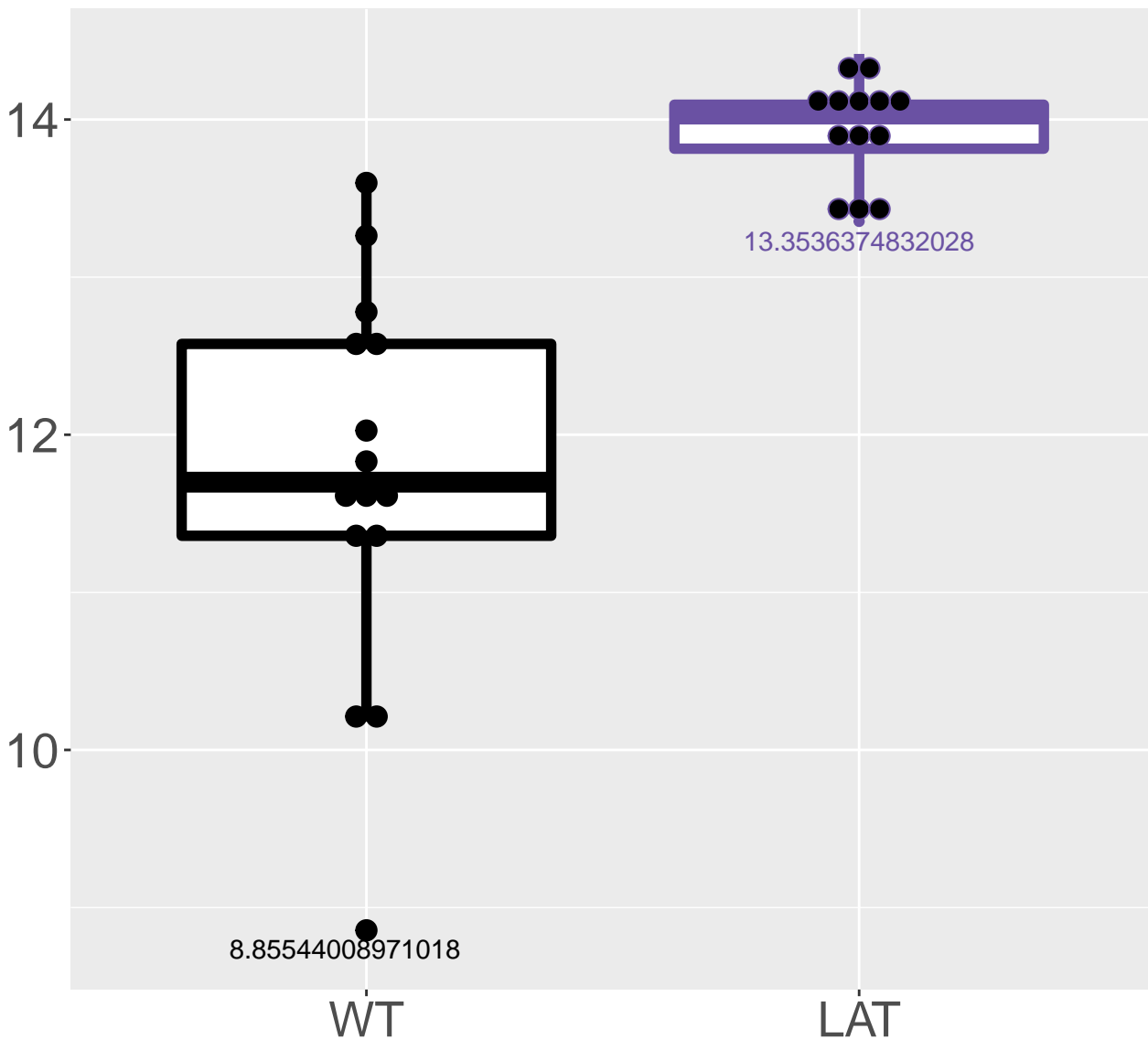


**FDR = 2.4e-05, FC = -1.3**

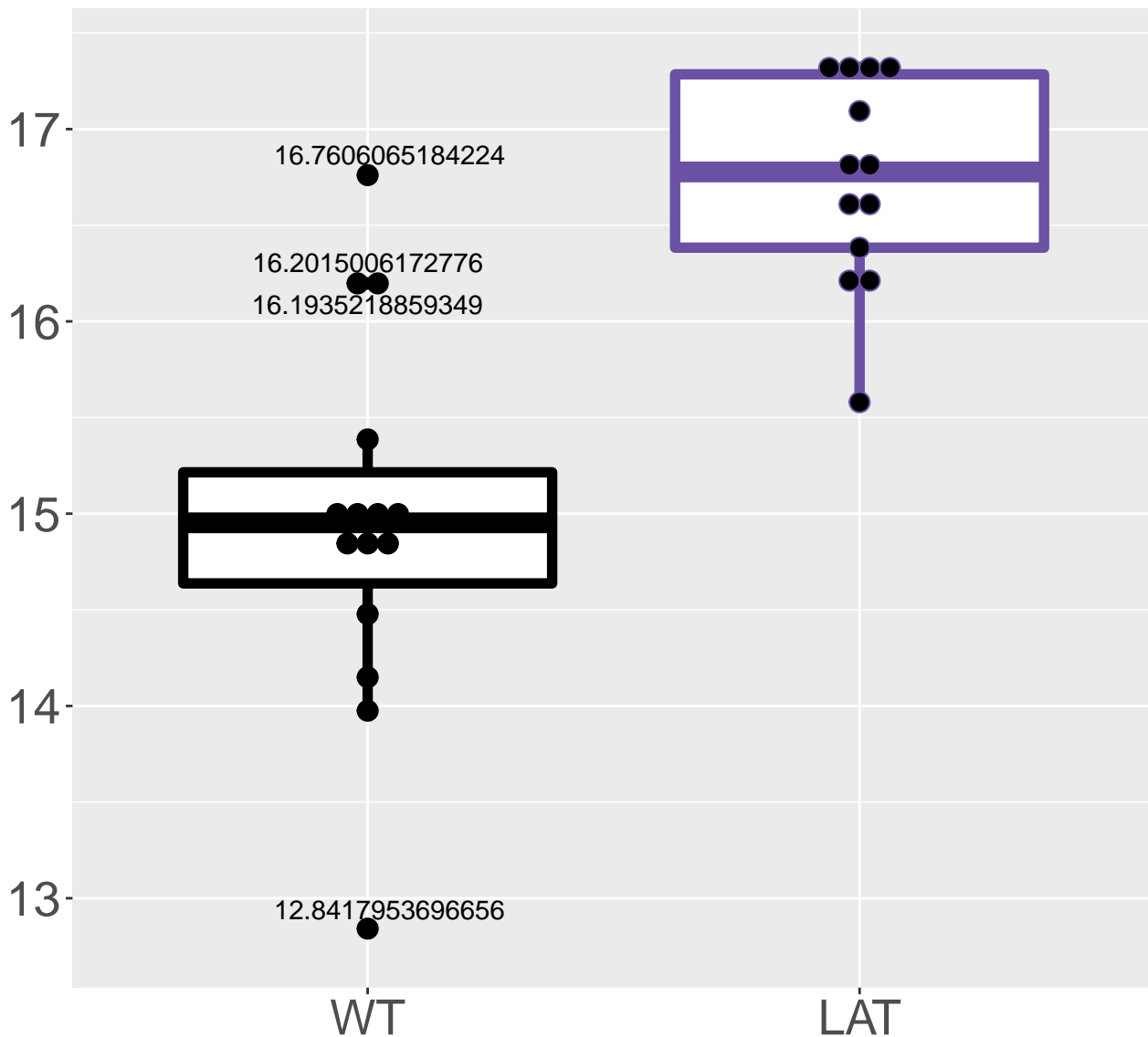


**M247.0462T620.16**

**FDR = 2.5e-05, FC = 2.2**

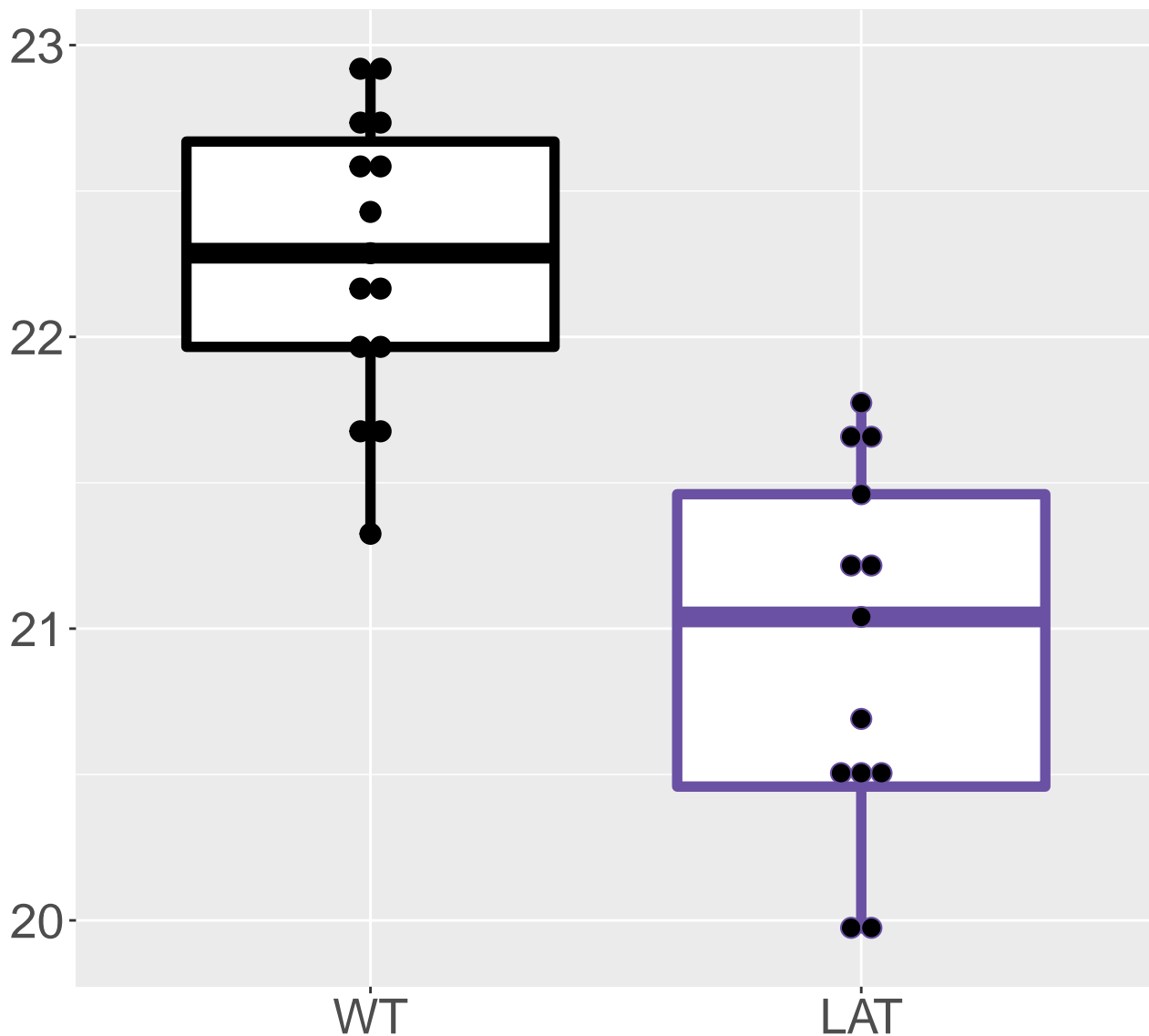


**M214.9965T586.66**  
**FDR = 2.5e-05, FC = 1.8**



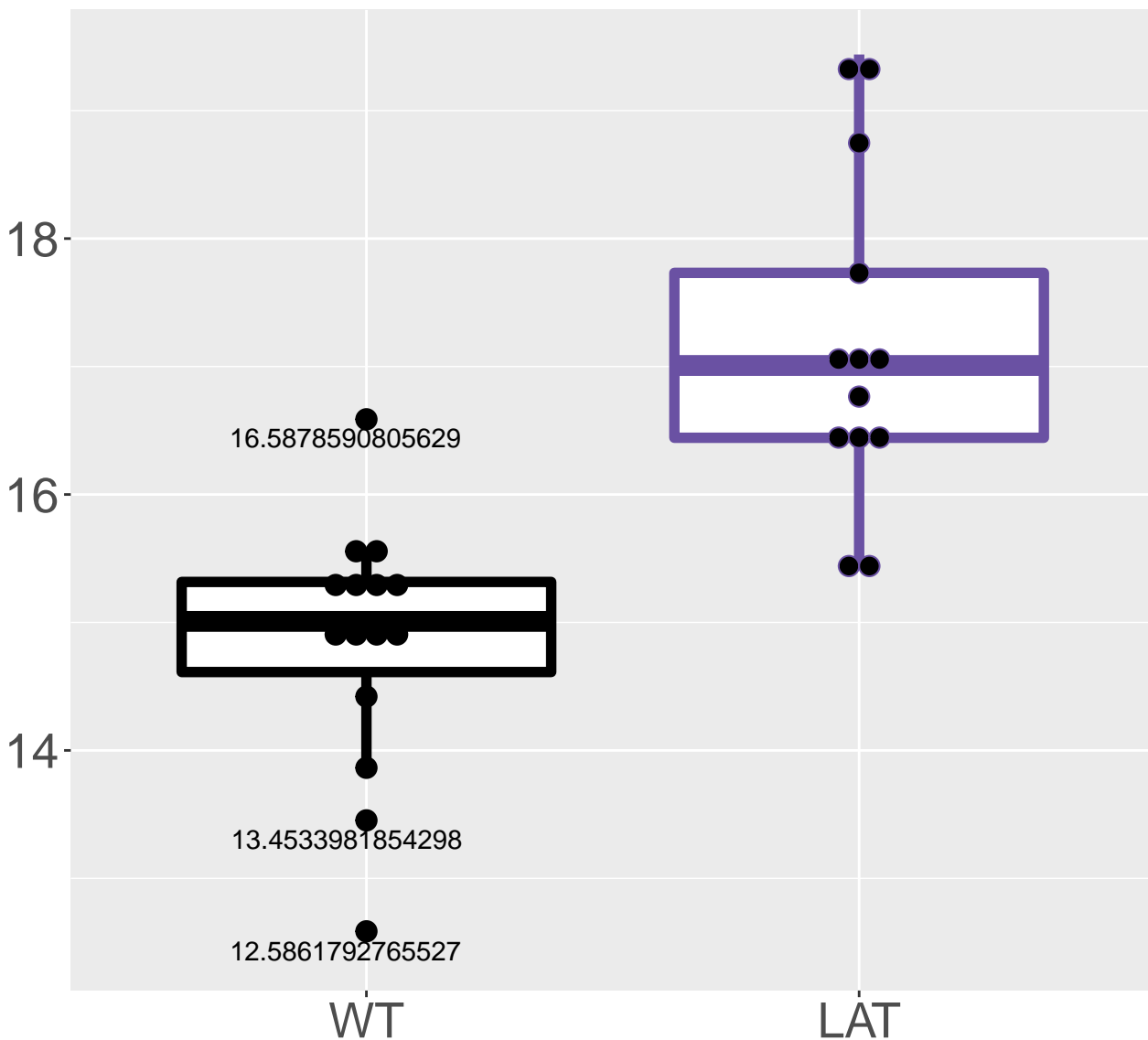
**M298.0701T538.81**

**FDR =  $2.5e-05$ , FC =  $-1.3$**



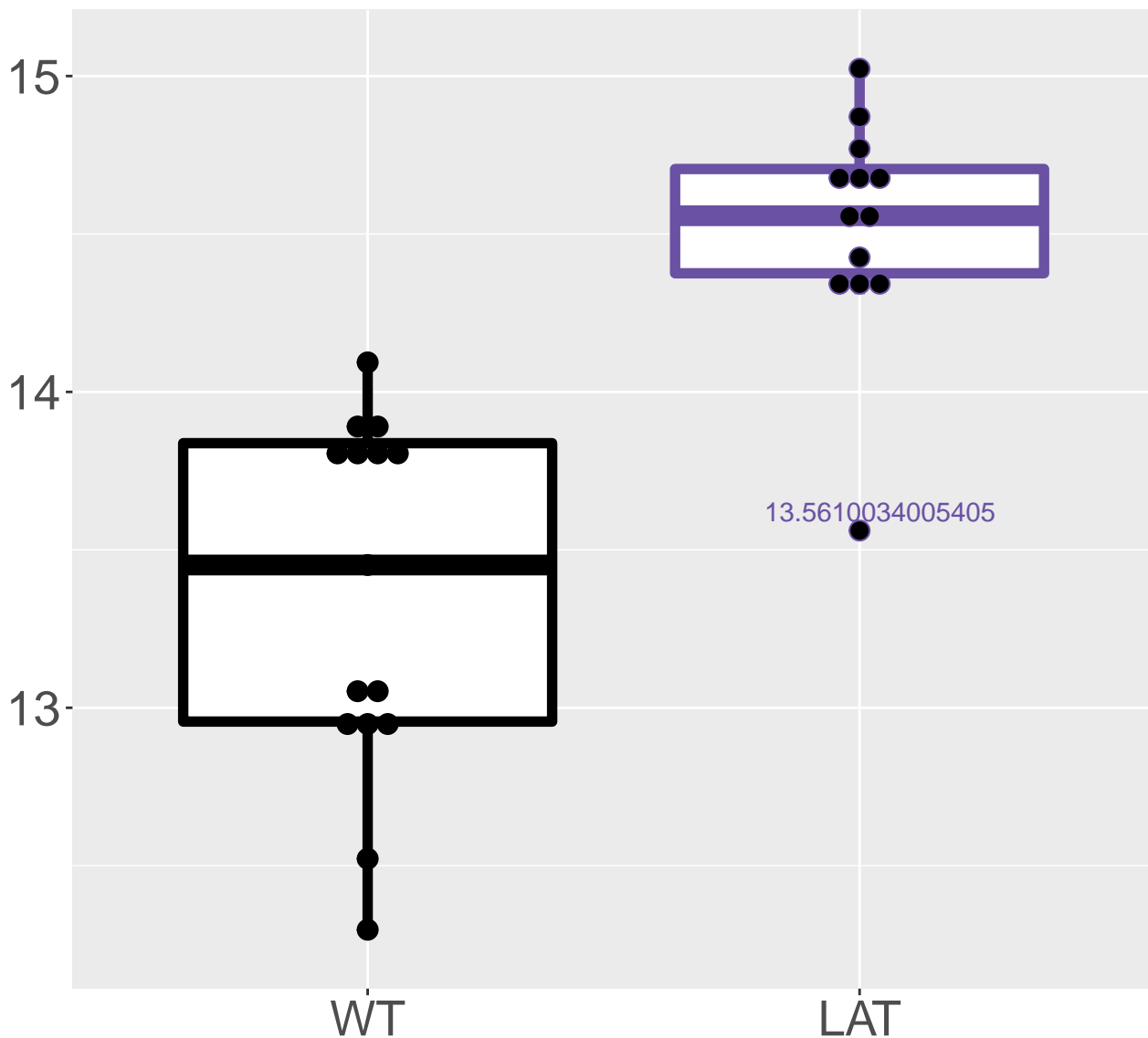
**M603.1589T490.76**

**FDR = 2.6e-05, FC = 2.3, sex\***



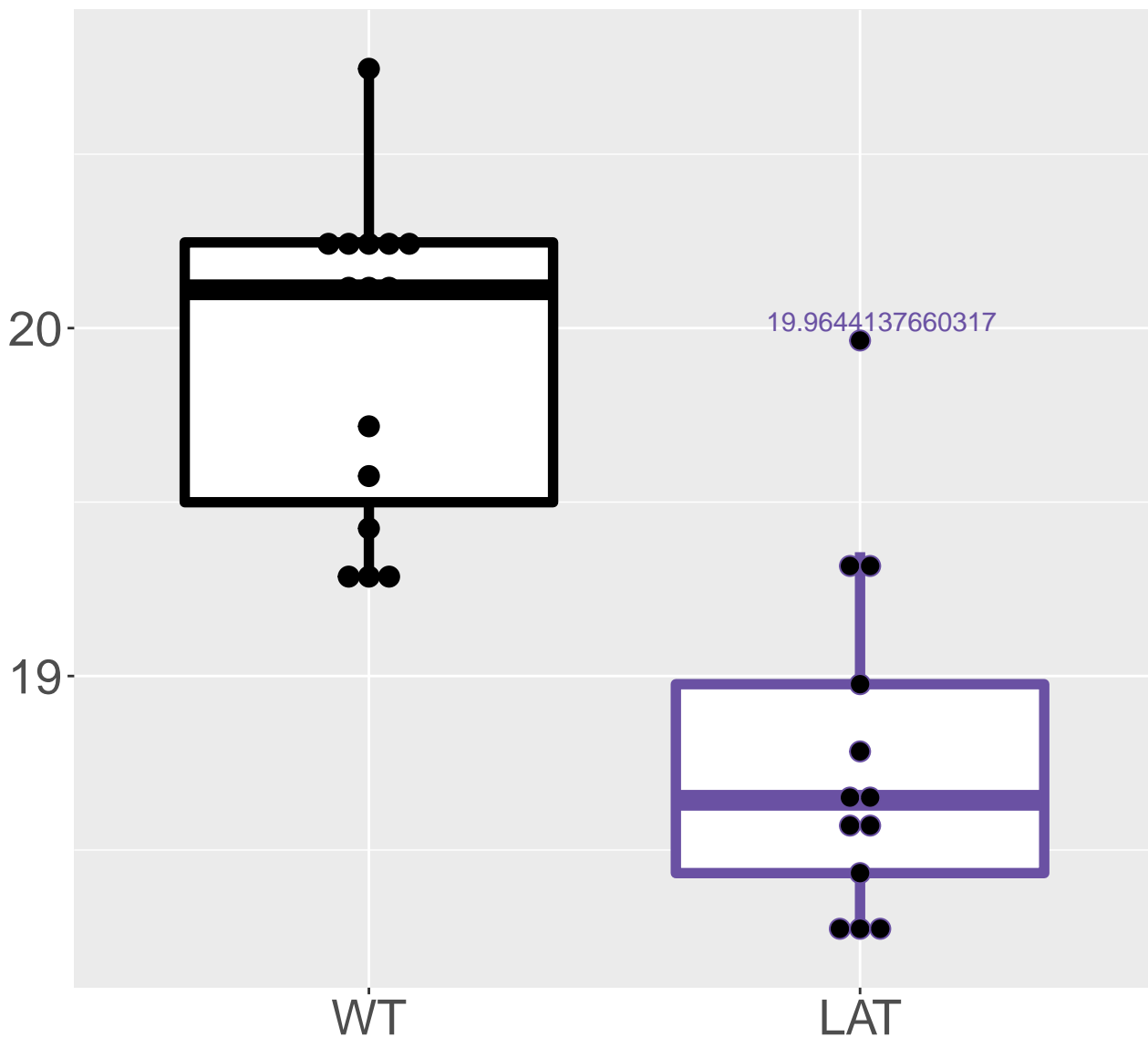
**M762.6608T622.46**

**FDR = 2.6e-05, FC = 1.2**



**M502.1785T559.76**

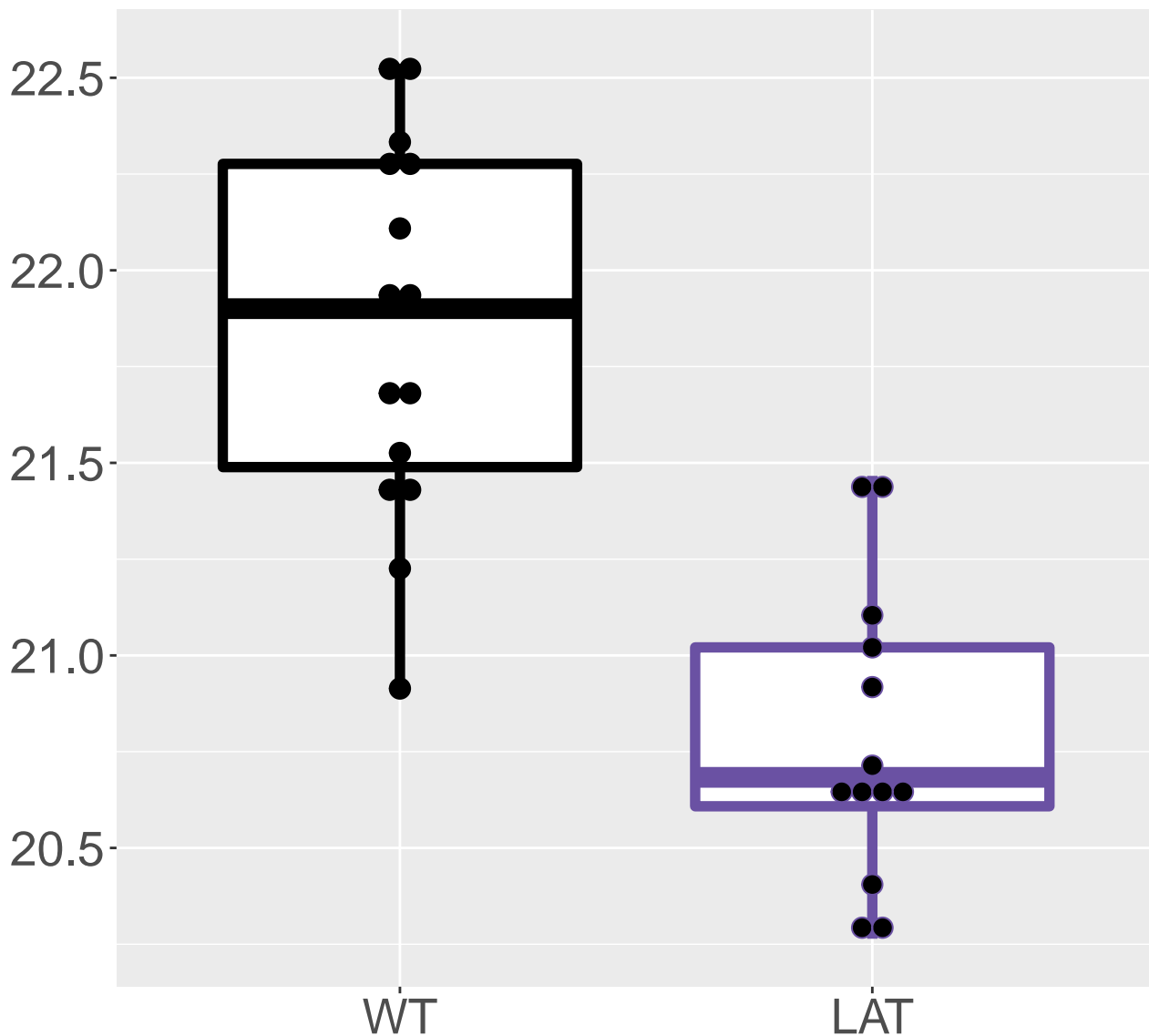
**FDR = 2.9e-05, FC = -1.2**



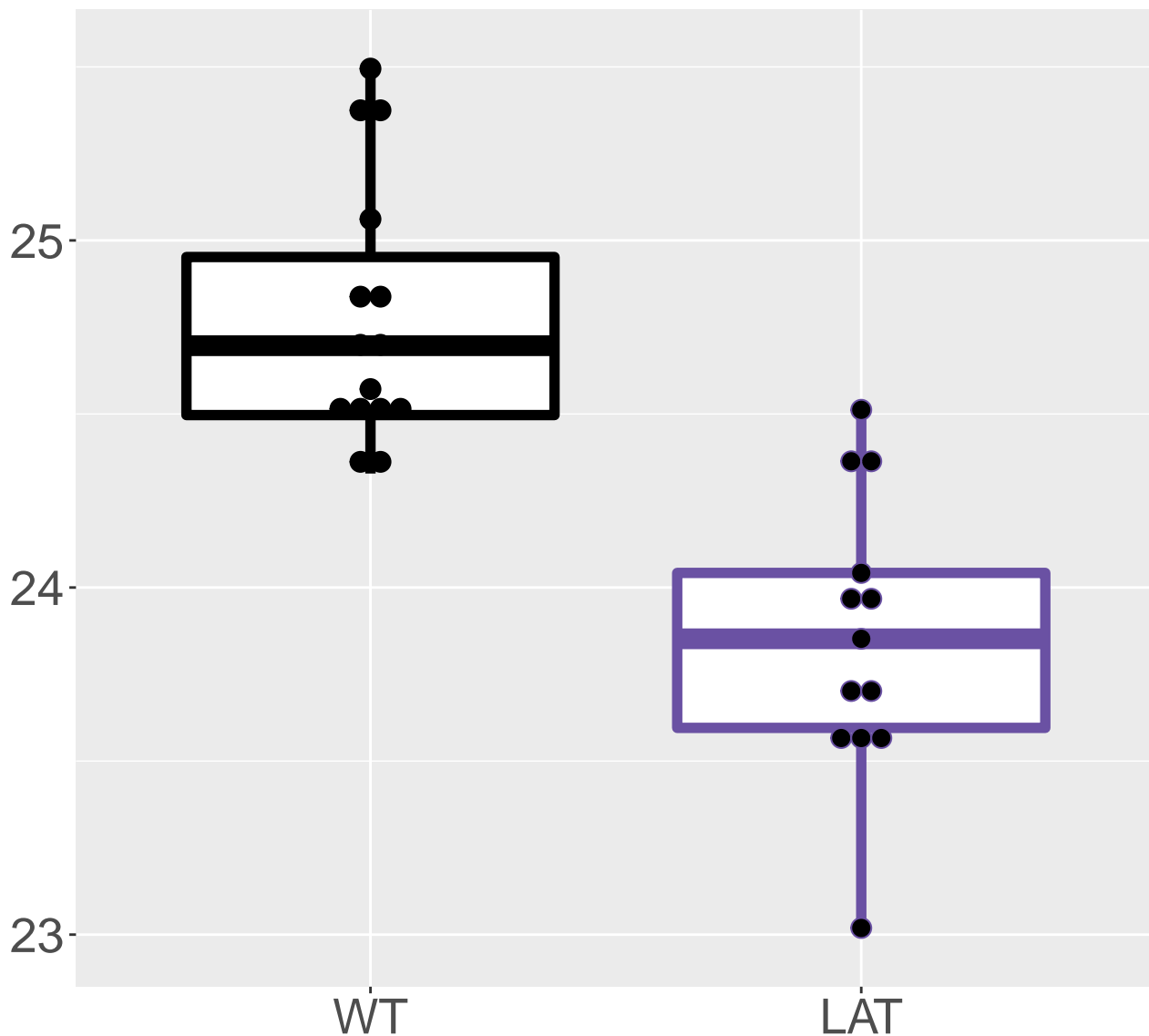


**M413.1309T626.1**

**FDR =  $2.9\text{e-}05$ , FC =  $-1.1$**

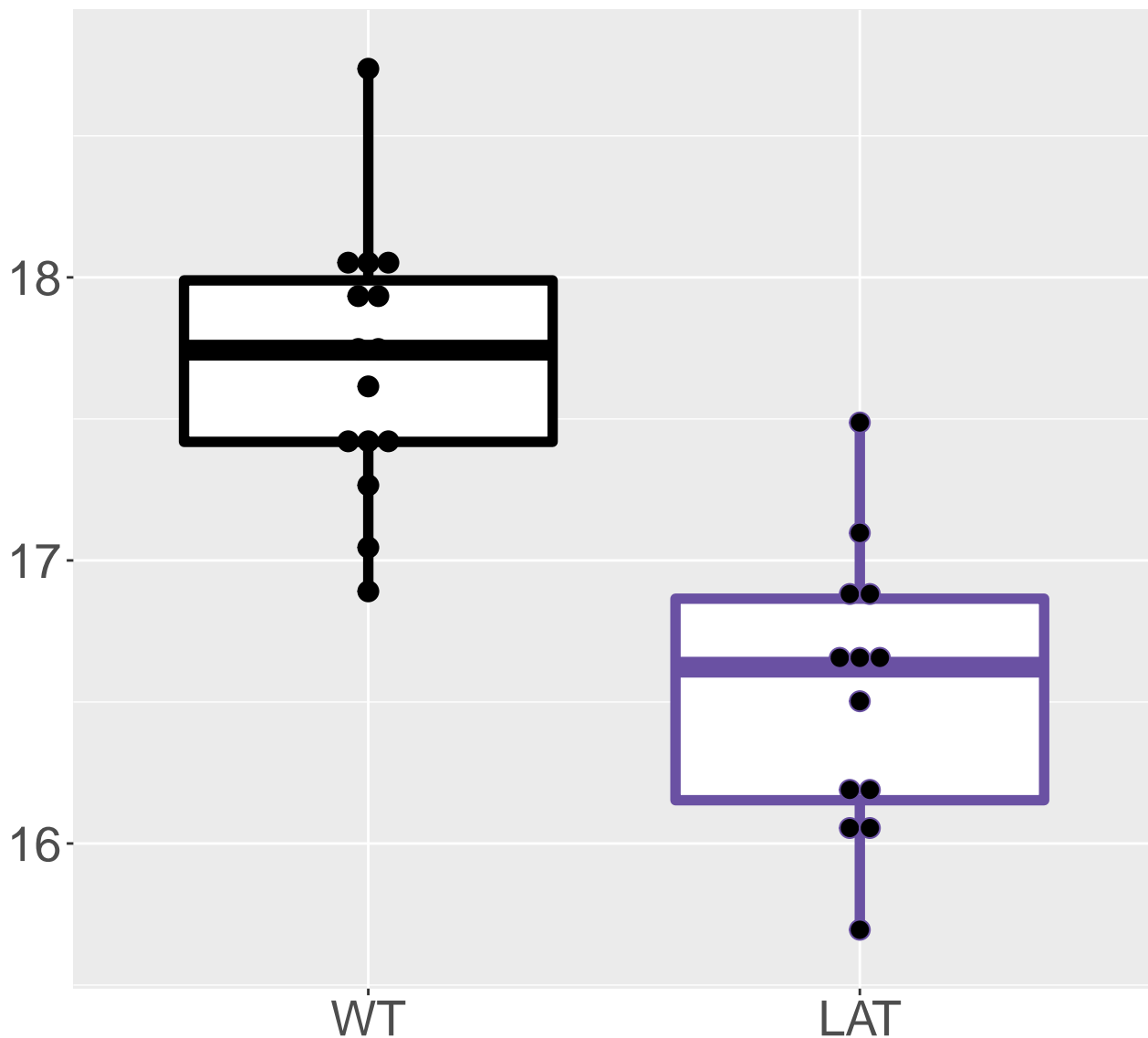


**(+)-Pantothenic acid;Pantothenic acid;D-Panto**  
**FDR = 2.9e-05, FC = -0.92**



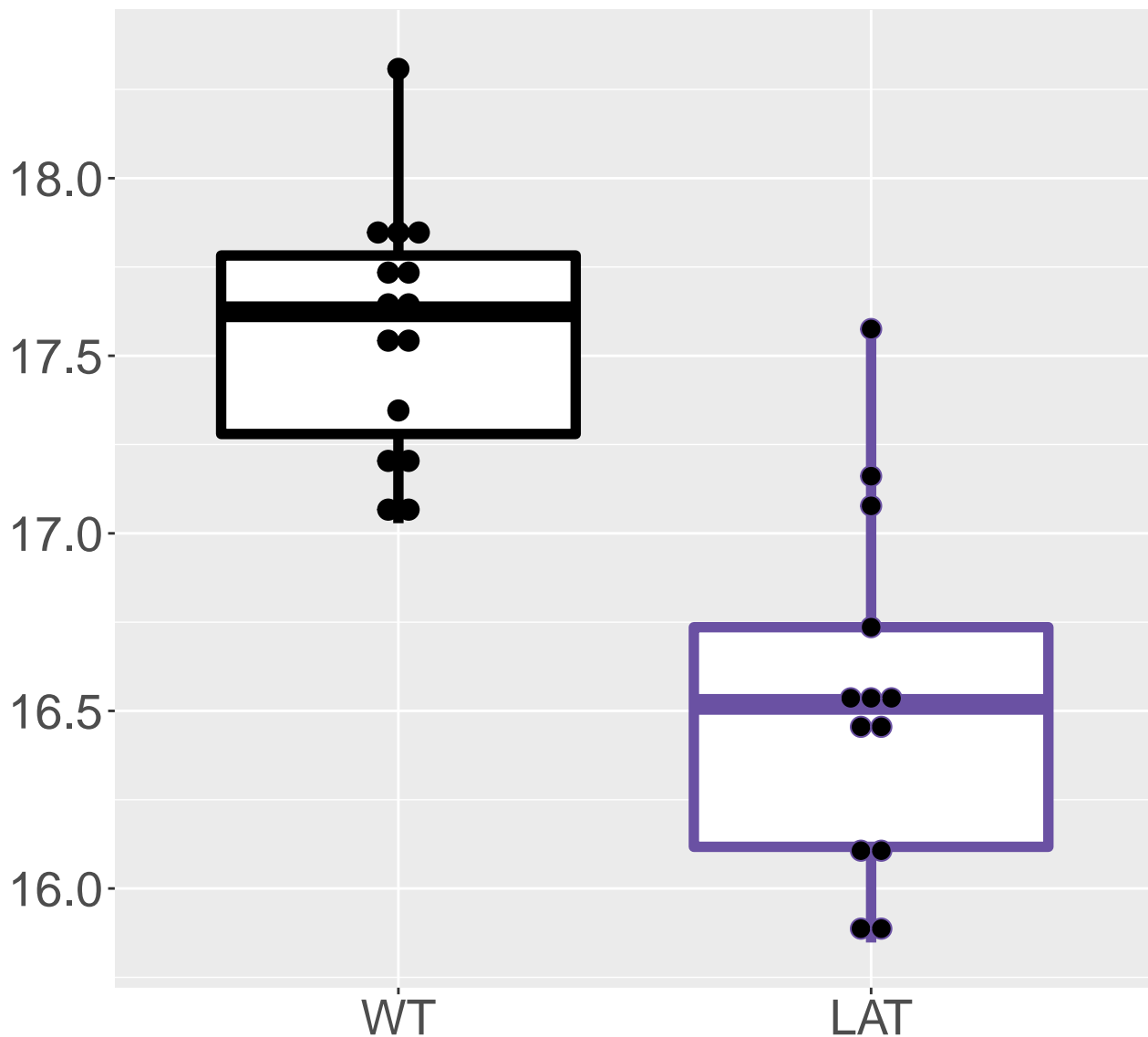
**M574.1993T542.35**

**FDR =  $2.9\text{e-}05$ , FC =  $-1.2$**



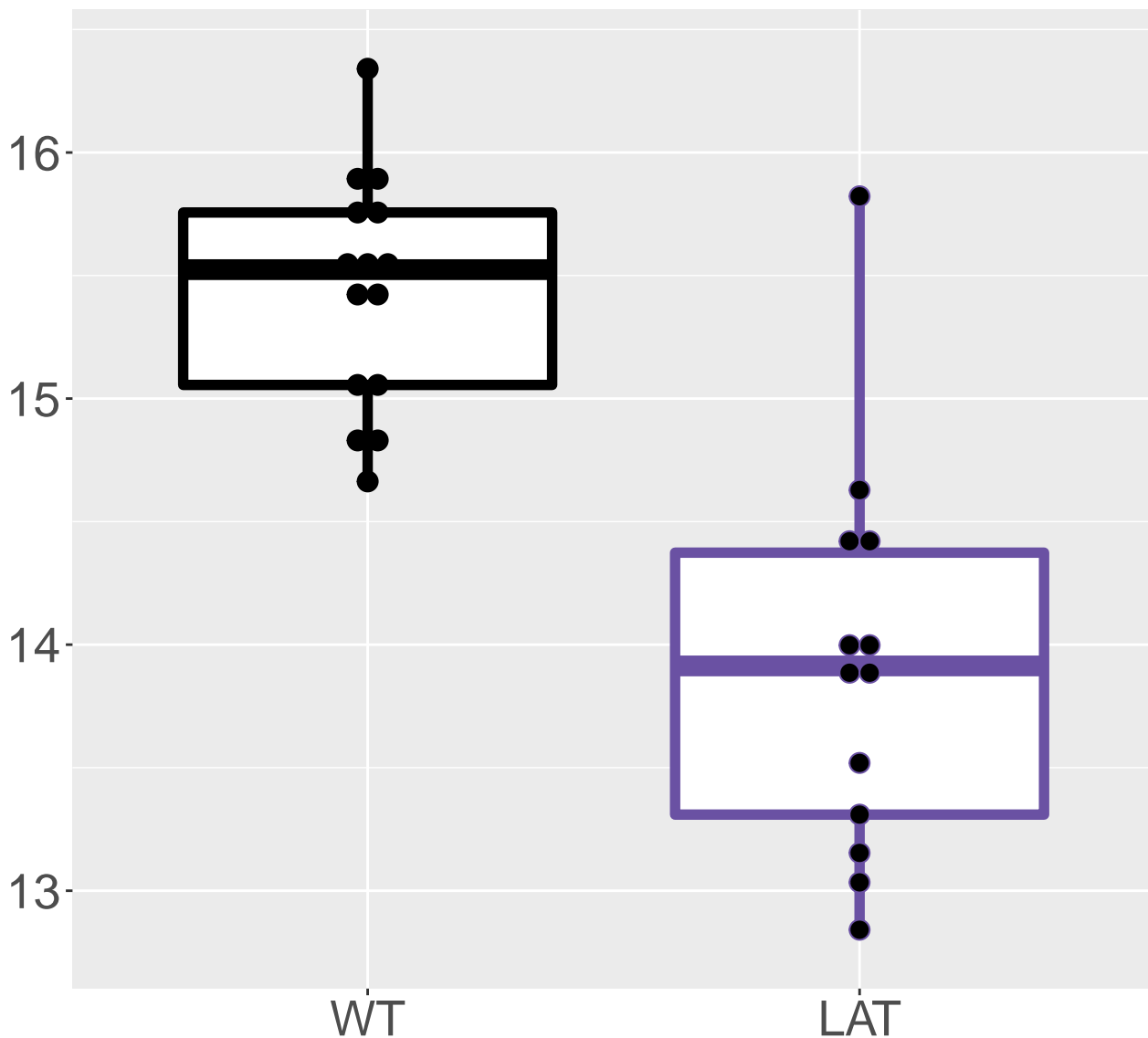
**M546.1684T589.35**

**FDR =  $2.9e-05$ , FC = -1**

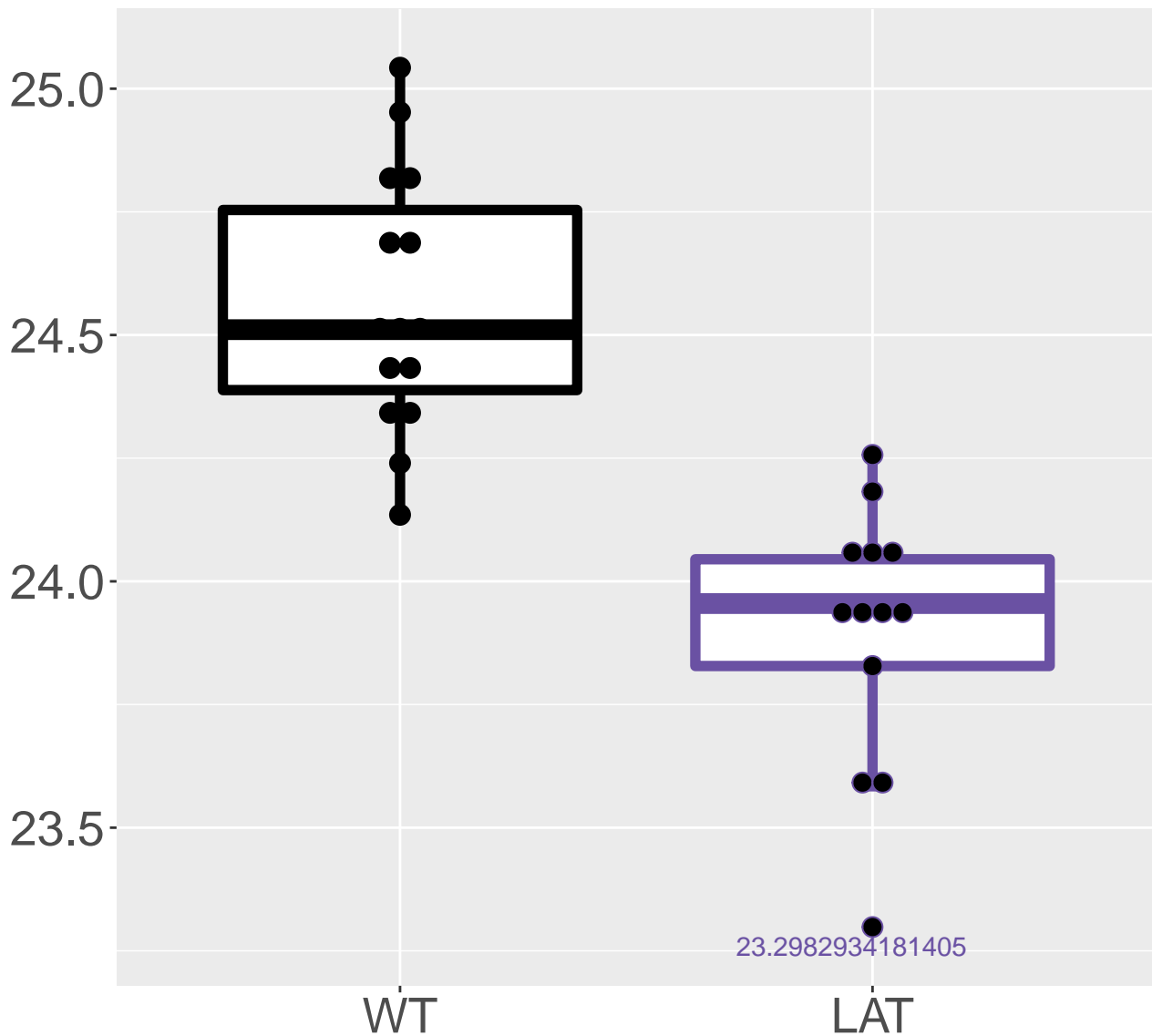


**M779.2952T634.39**

**FDR =  $3e-05$ , FC = -1.5**

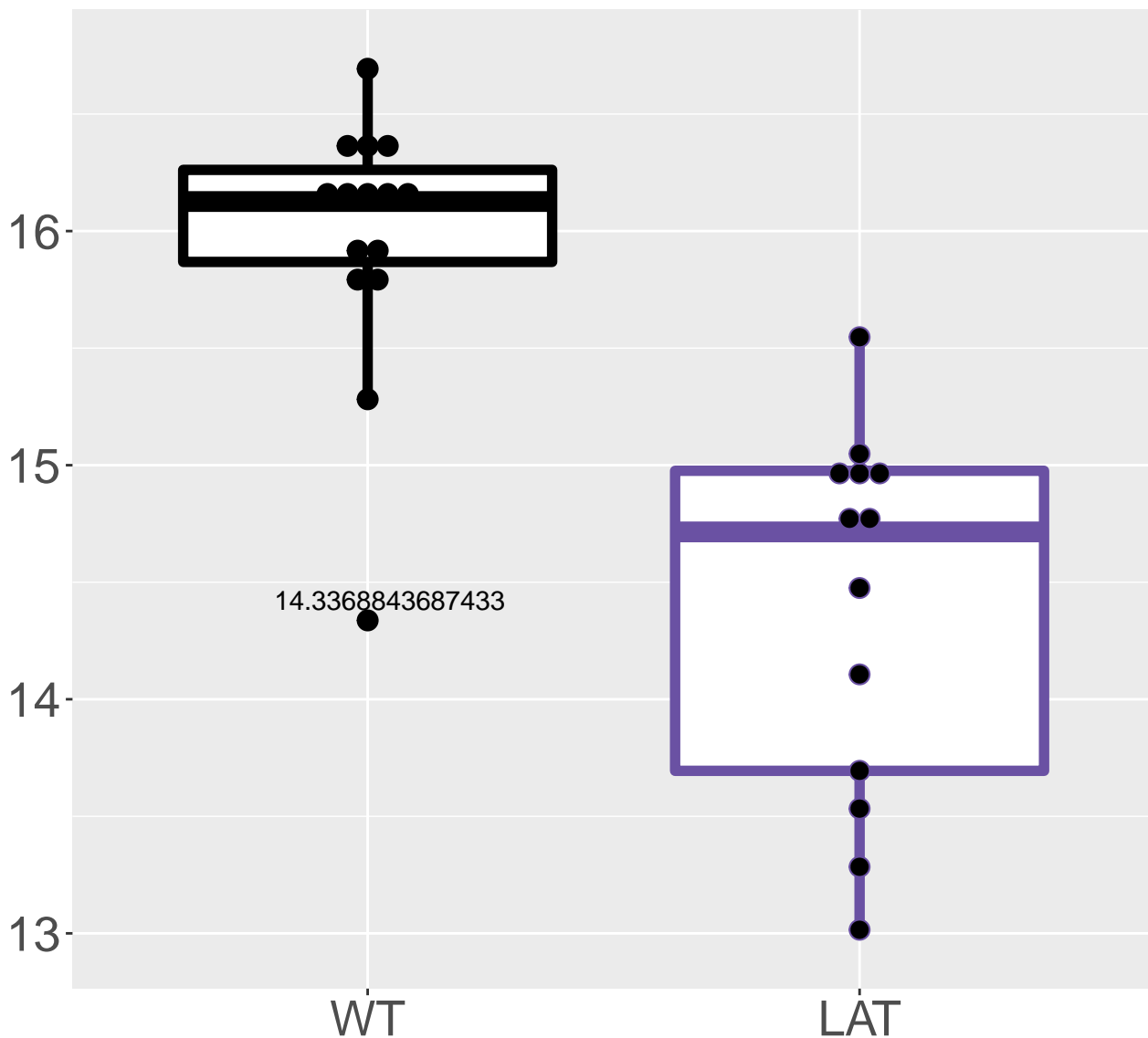


**L-Serine;Serine**  
**FDR = 3e-05, FC = -0.67**



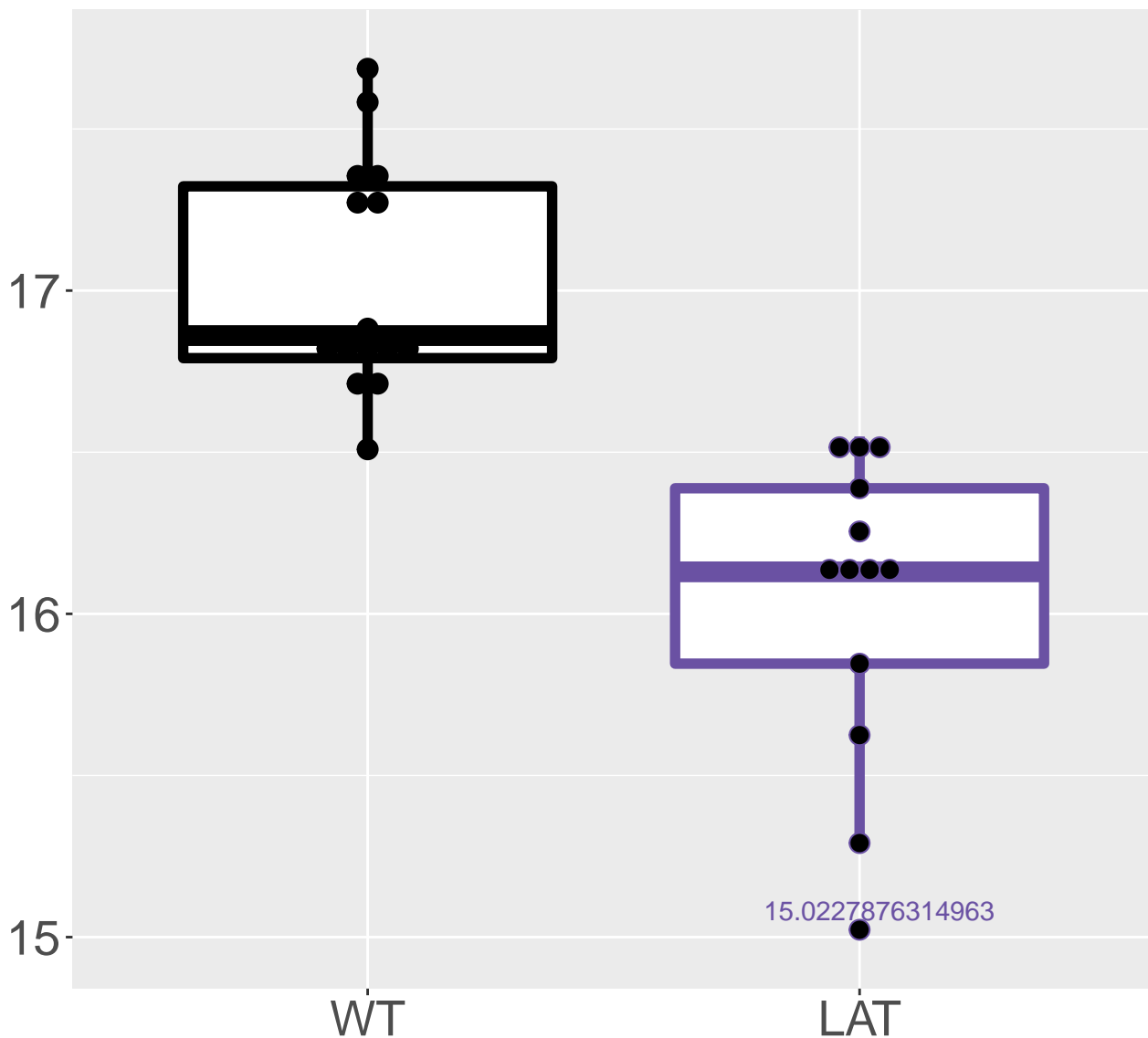
**M969.2926T574.32\_2**

**FDR =  $3.4e-05$ , FC =  $-1.6$**



**M798.5658T82.22**

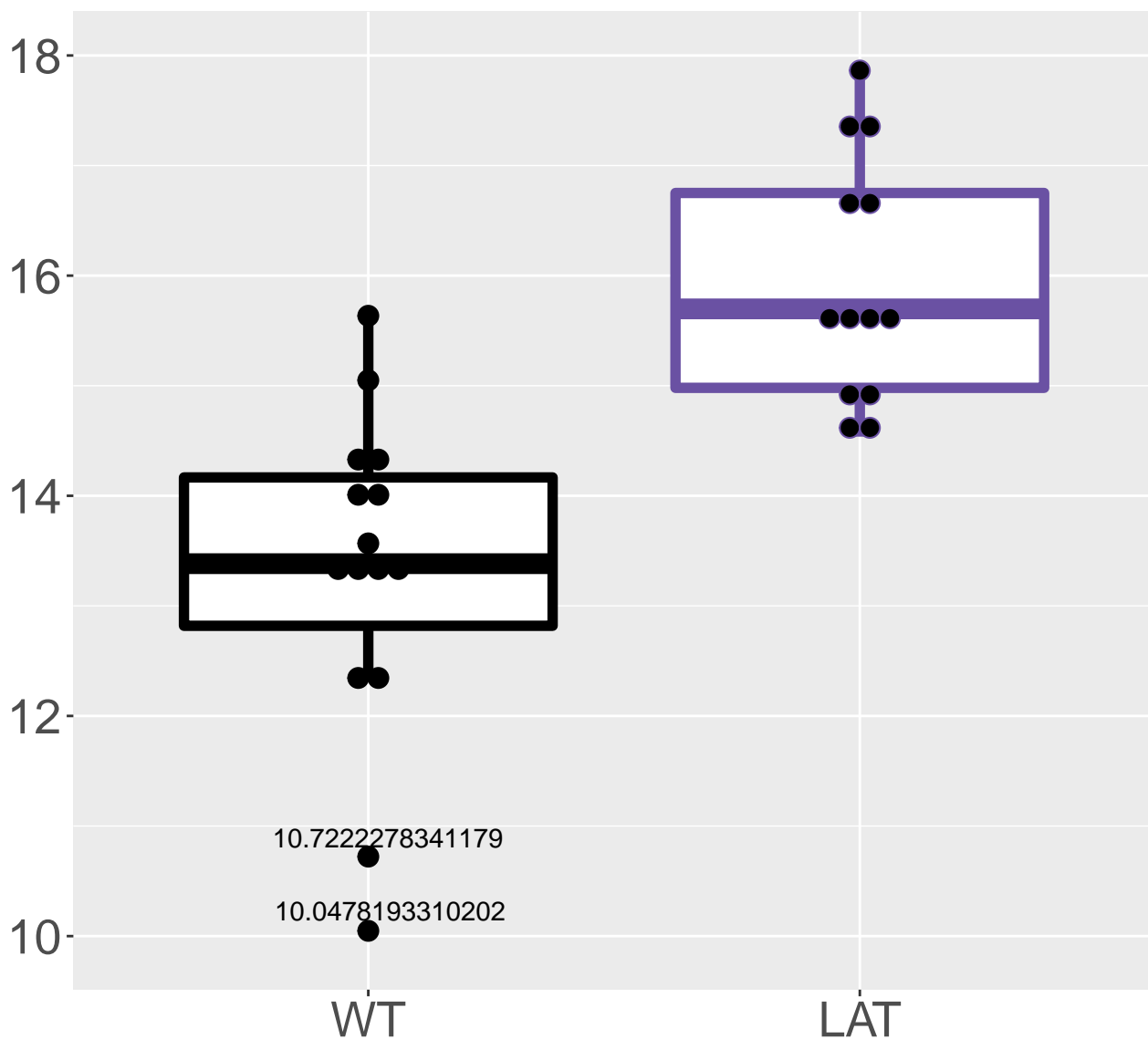
**FDR =  $3.4e-05$ , FC =  $-0.99$**





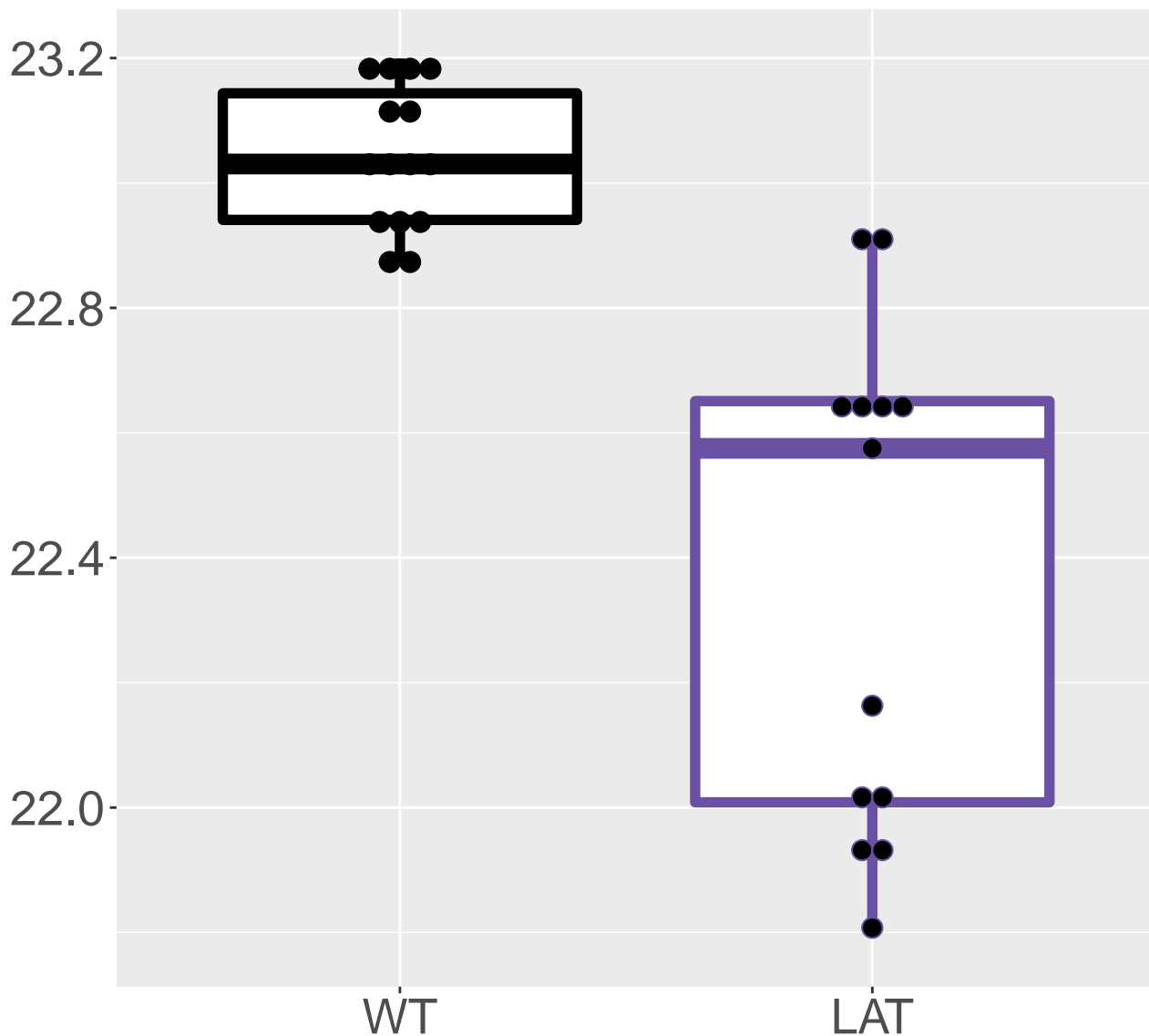
**M399.0105T618.93**

**FDR = 3.5e-05, FC = 2.6, sex\***

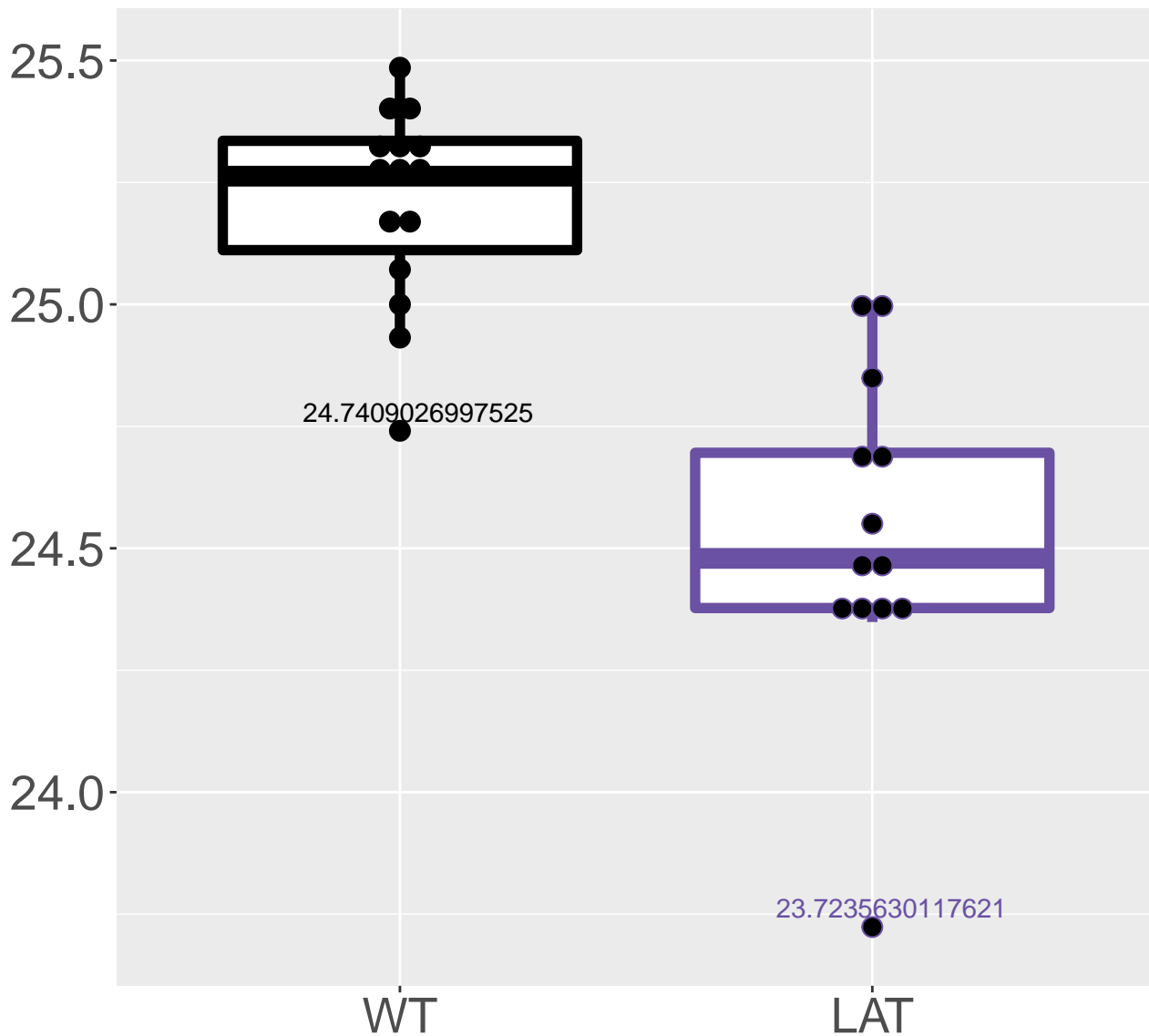


**M303.06T348.74**

**FDR =  $3.5e-05$ , FC =  $-0.67$**

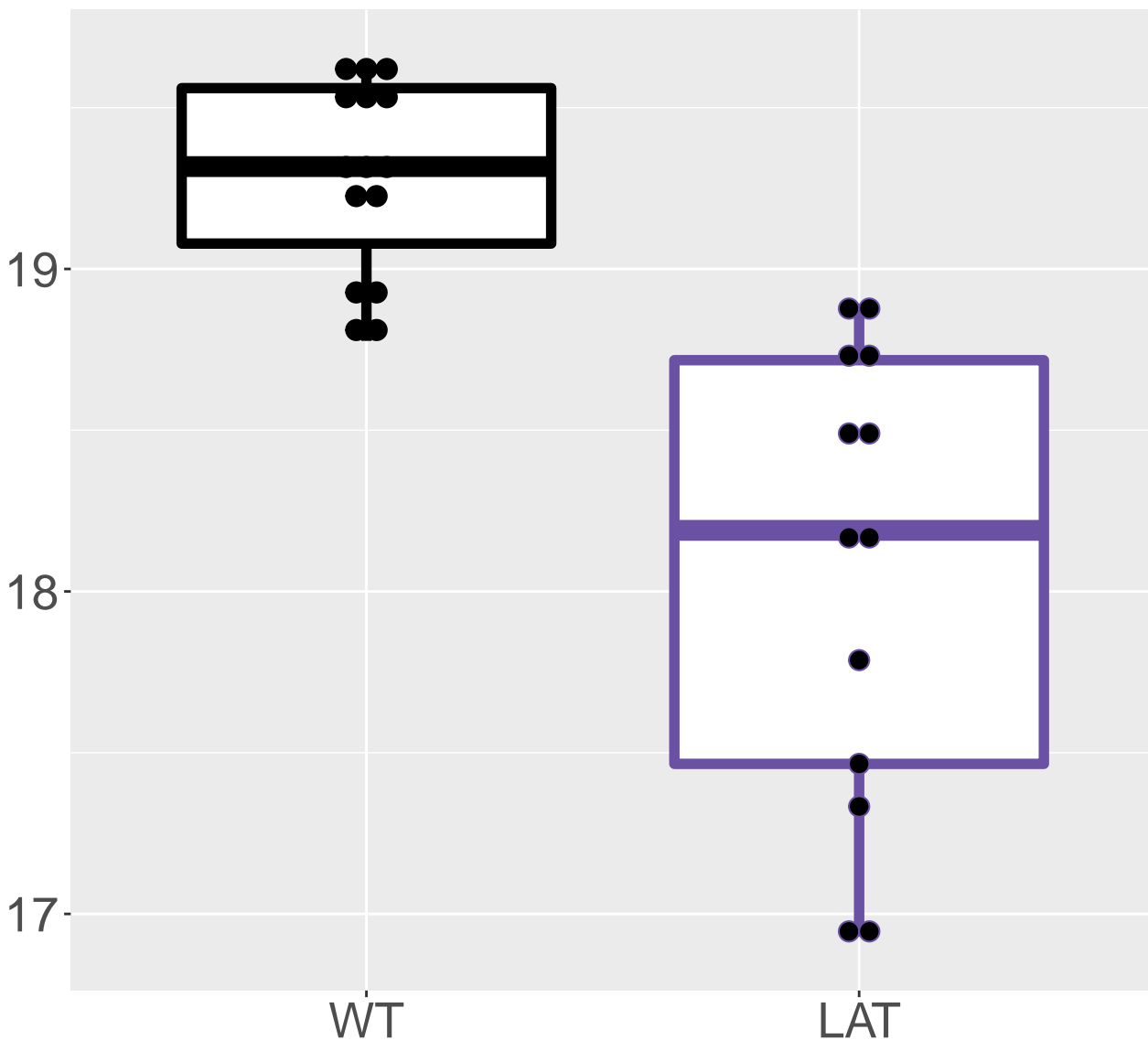


**L-Threonine;Threonine|L-Homoserine|D-allo**  
**FDR = 3.8e-05, FC = -0.68**

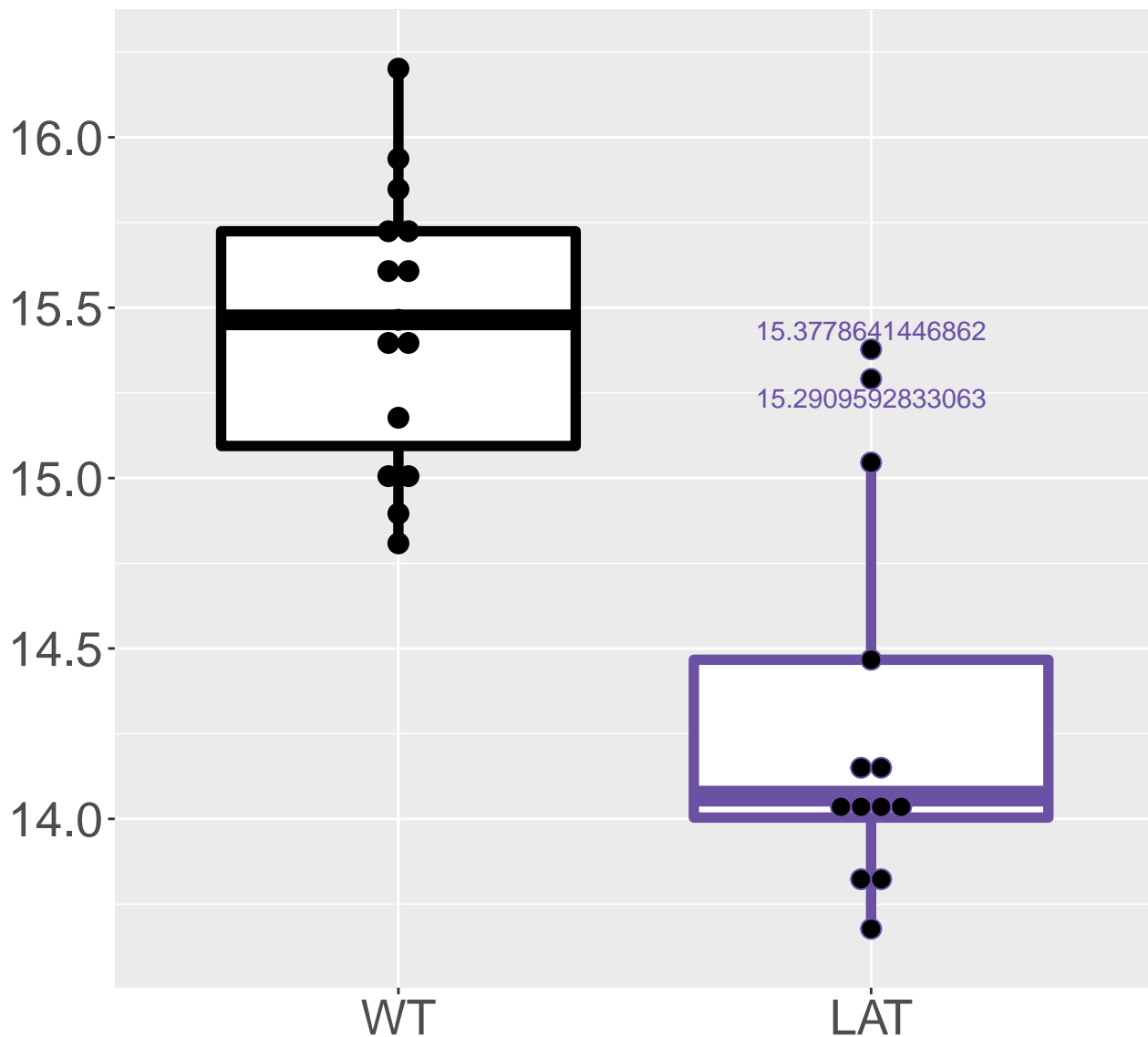


**M671.2288T526.03**

**FDR =  $3.9\text{e-}05$ , FC = -1.2**

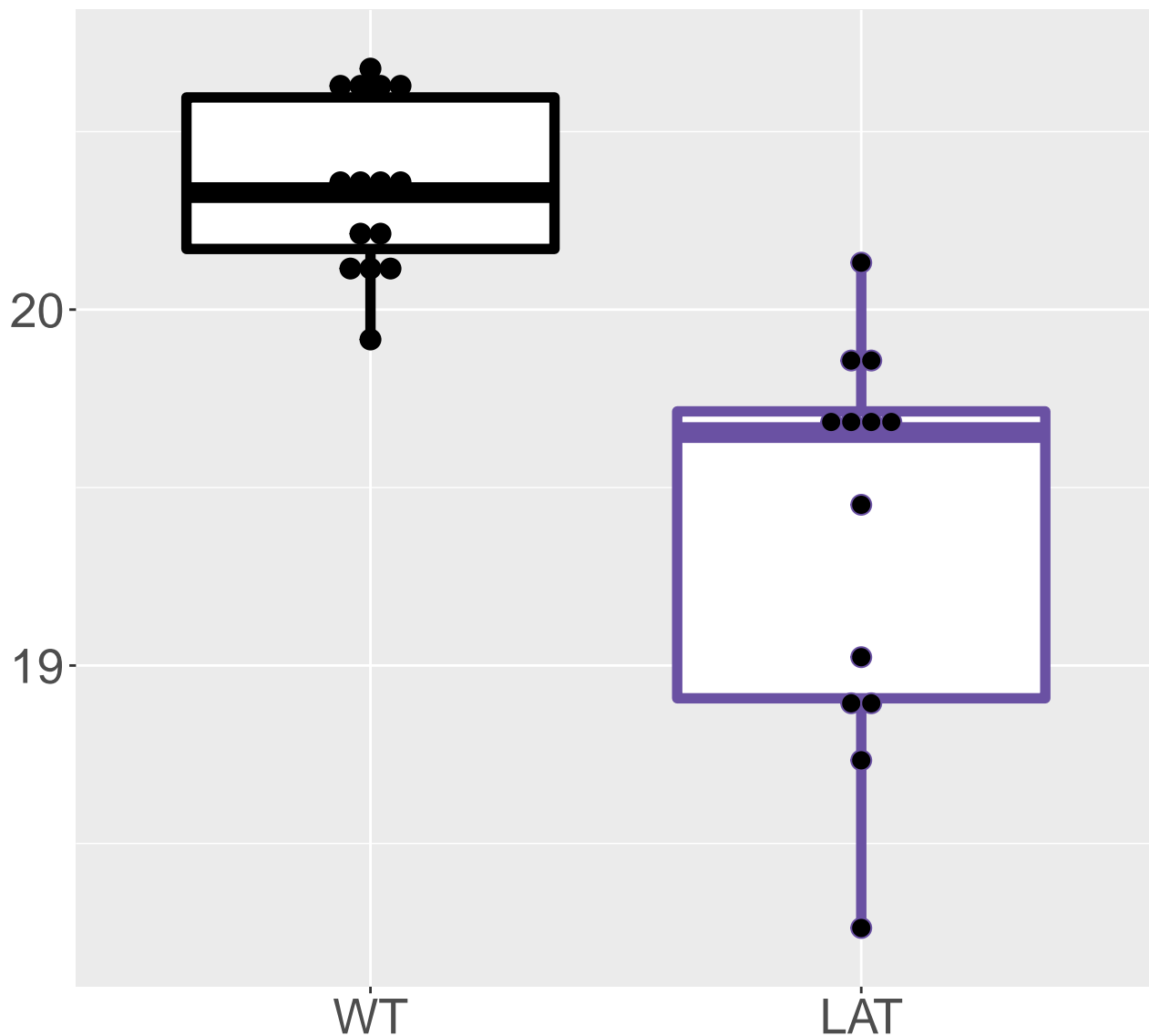


**M768.2362T667.6\_2**  
**FDR = 3.9e-05, FC = -1.1**



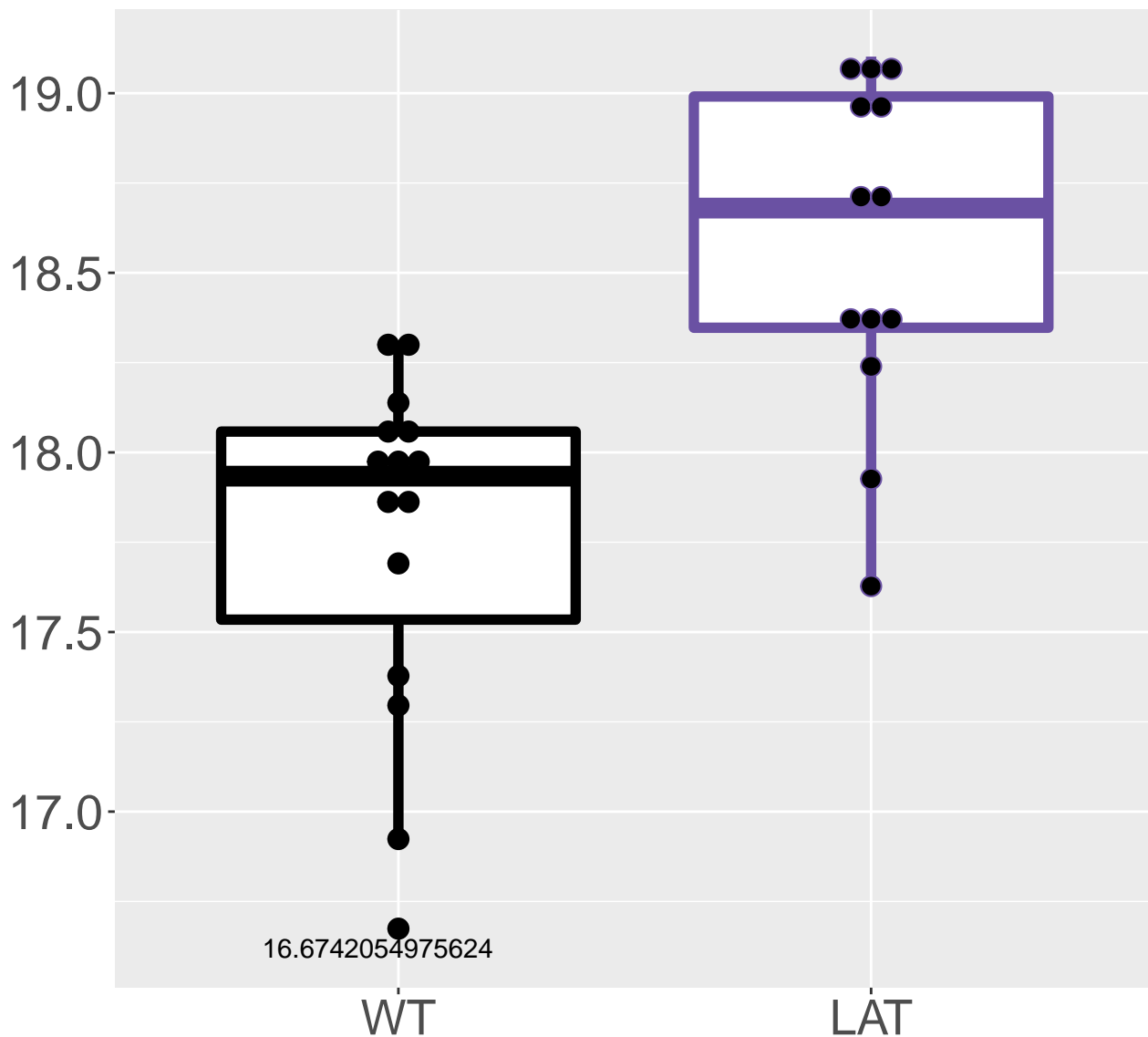
**M607.4738T77.32**

**FDR =  $3.9\text{e-}05$ , FC =  $-0.98$**



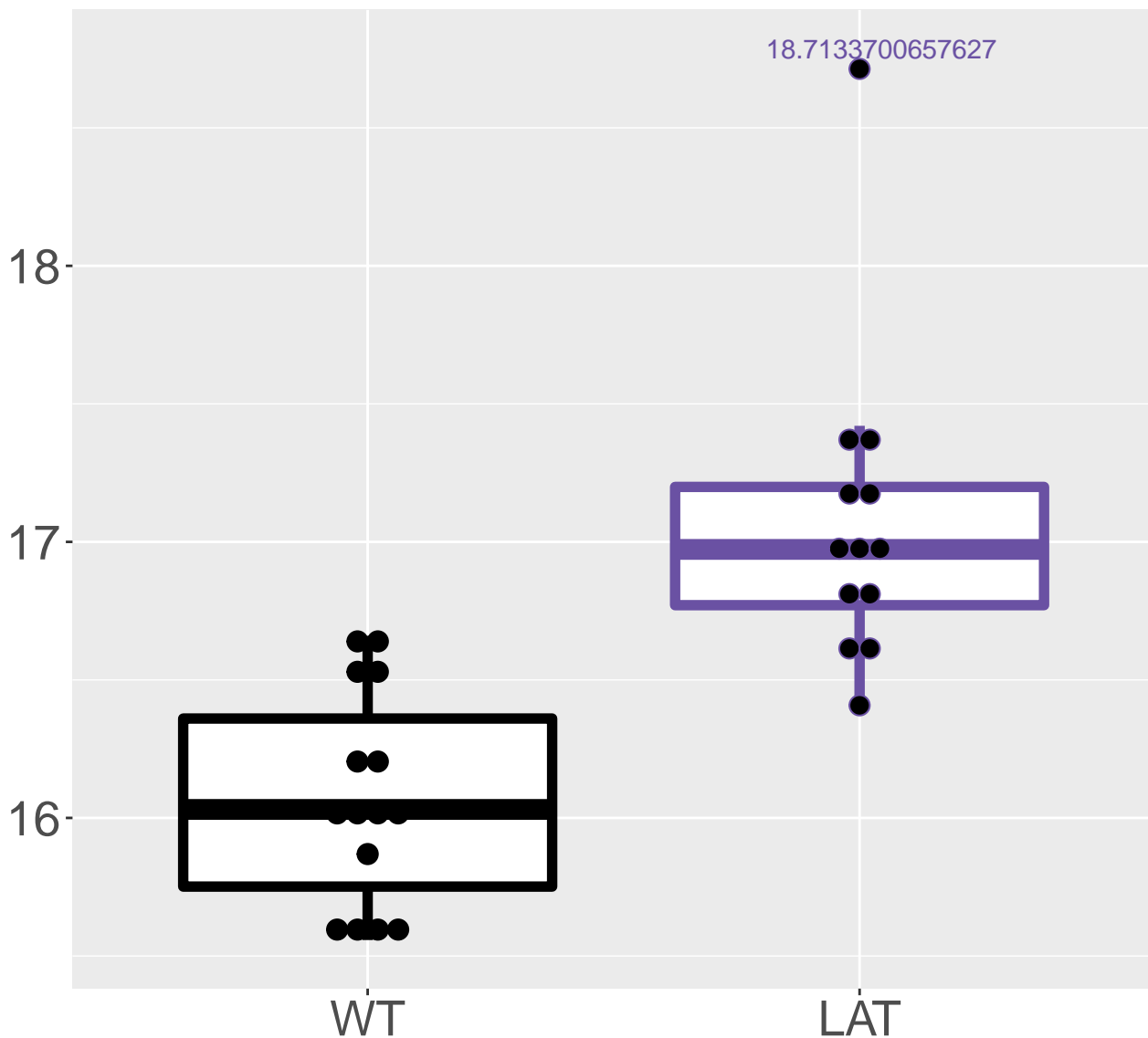
**M322.045T556.56**

**FDR = 4e-05, FC = 0.81, sex\*\*\***



**M266.0899T172.55**

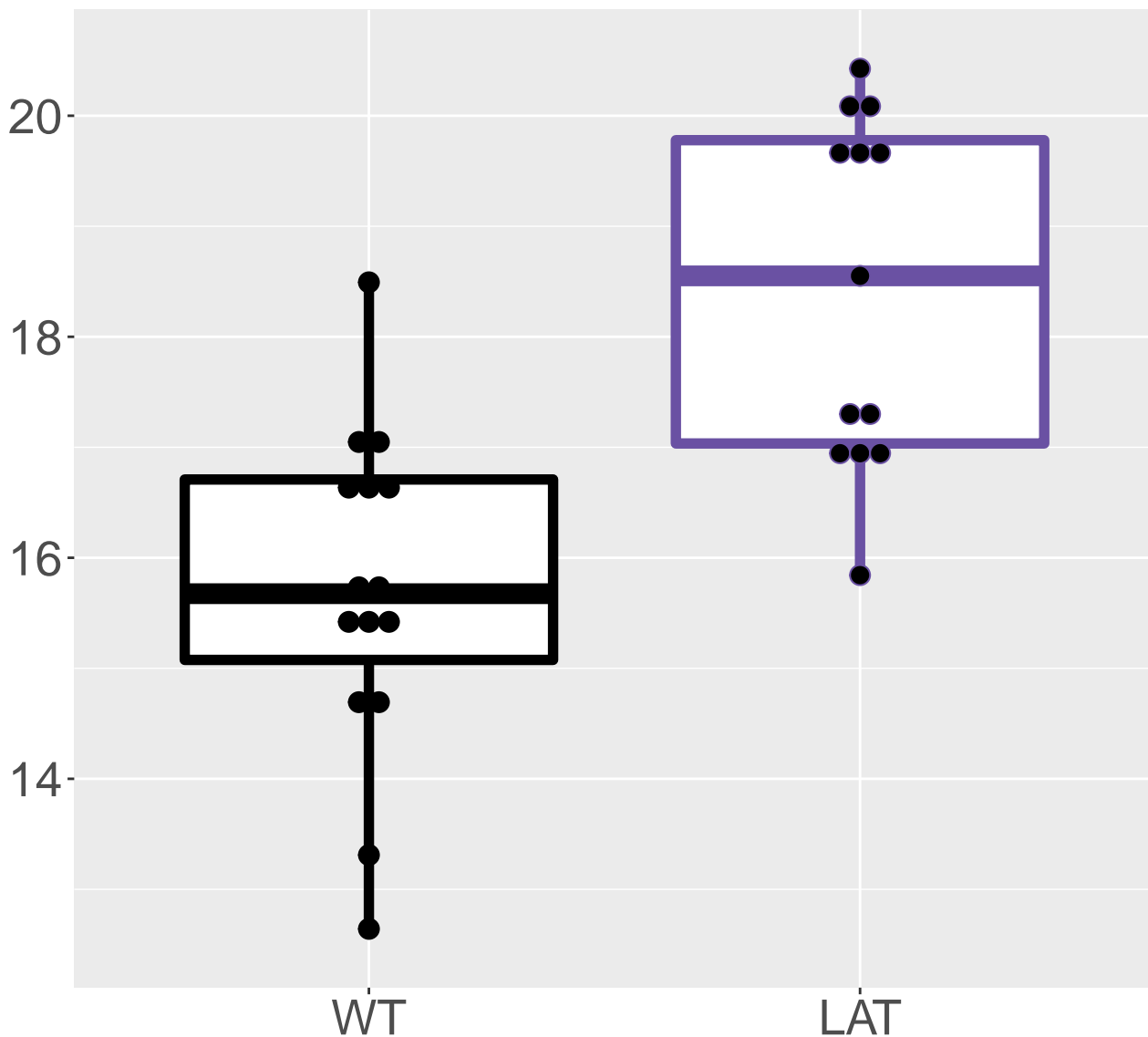
**FDR = 4e-05, FC = 1, sex\***





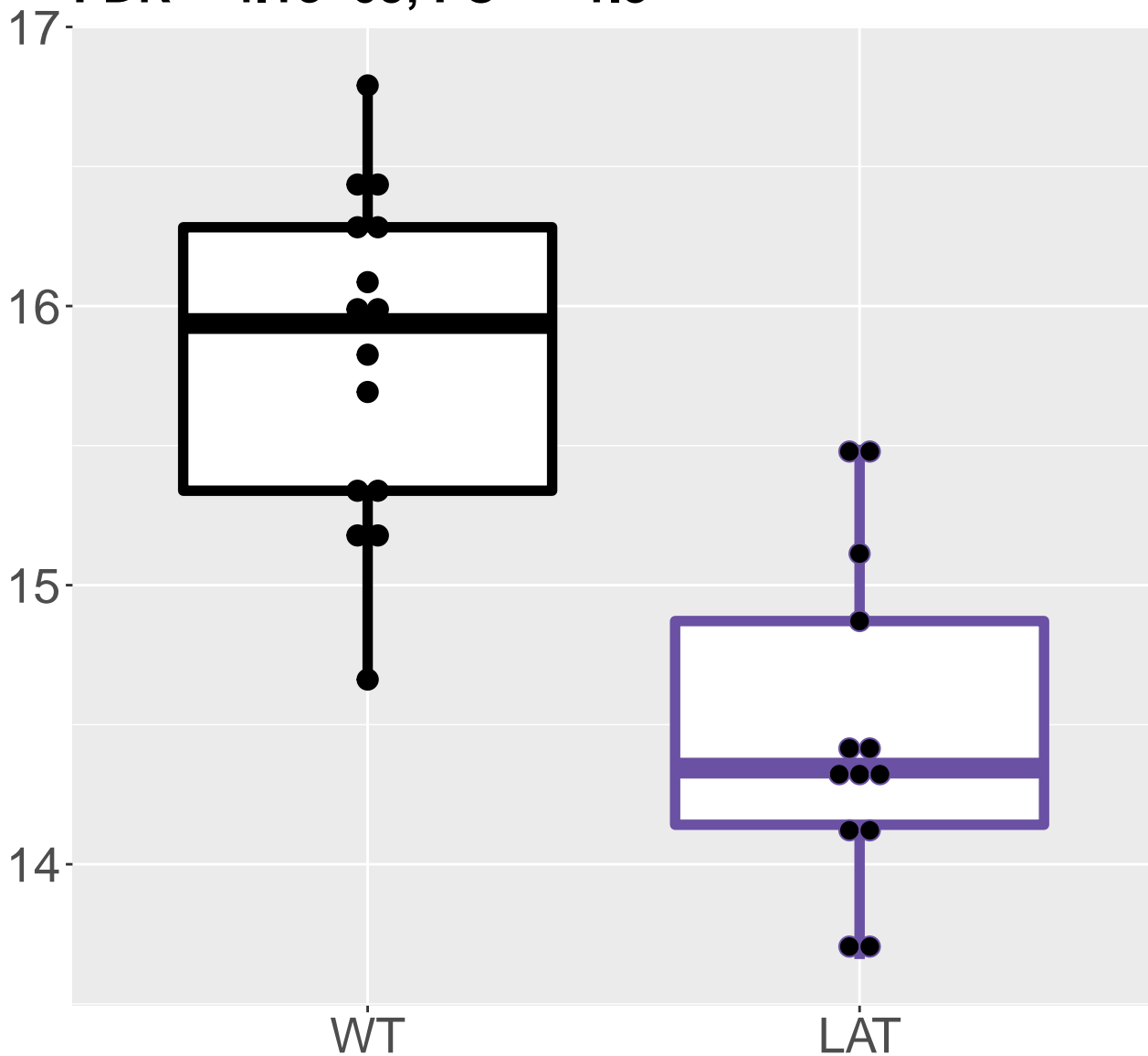
**M184.0727T276.17**

**FDR = 4.1e-05, FC = 2.7, sex\*\***

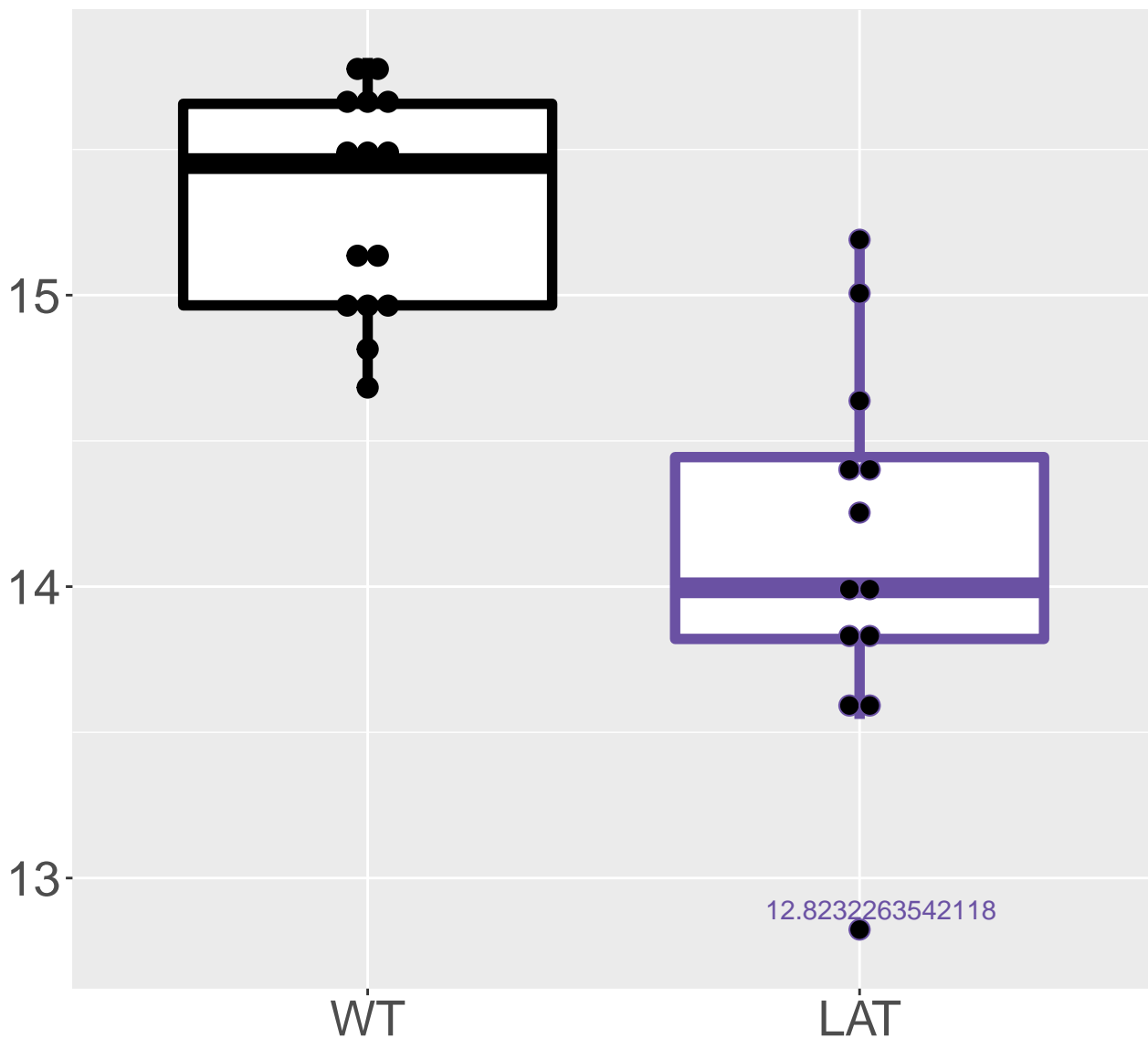


**M970.7959T633.96**

**FDR =  $4.1\text{e-}05$ , FC =  $-1.3$**

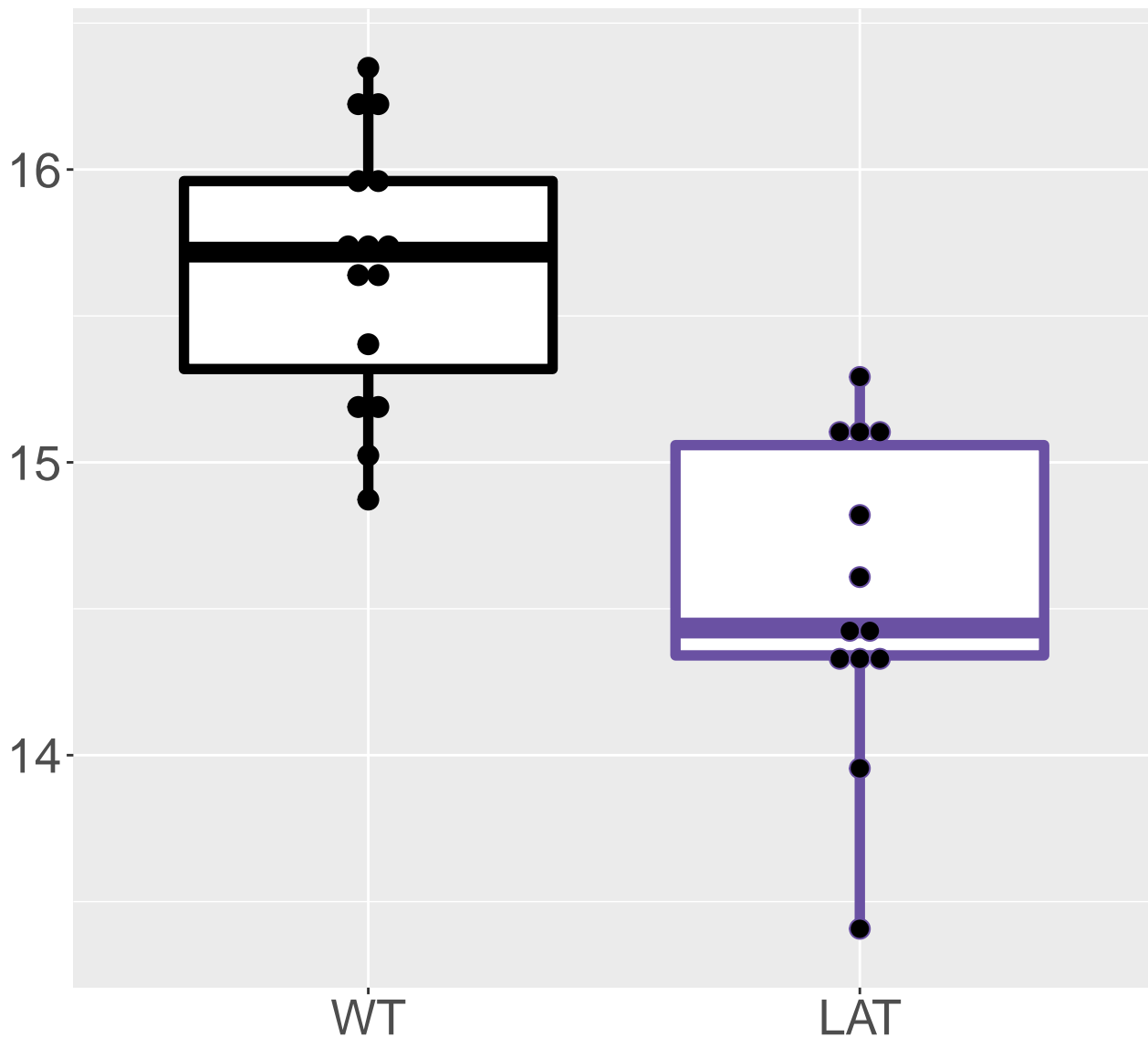


**M437.1376T659.55\_1**  
**FDR = 4.1e-05, FC = -1.2**



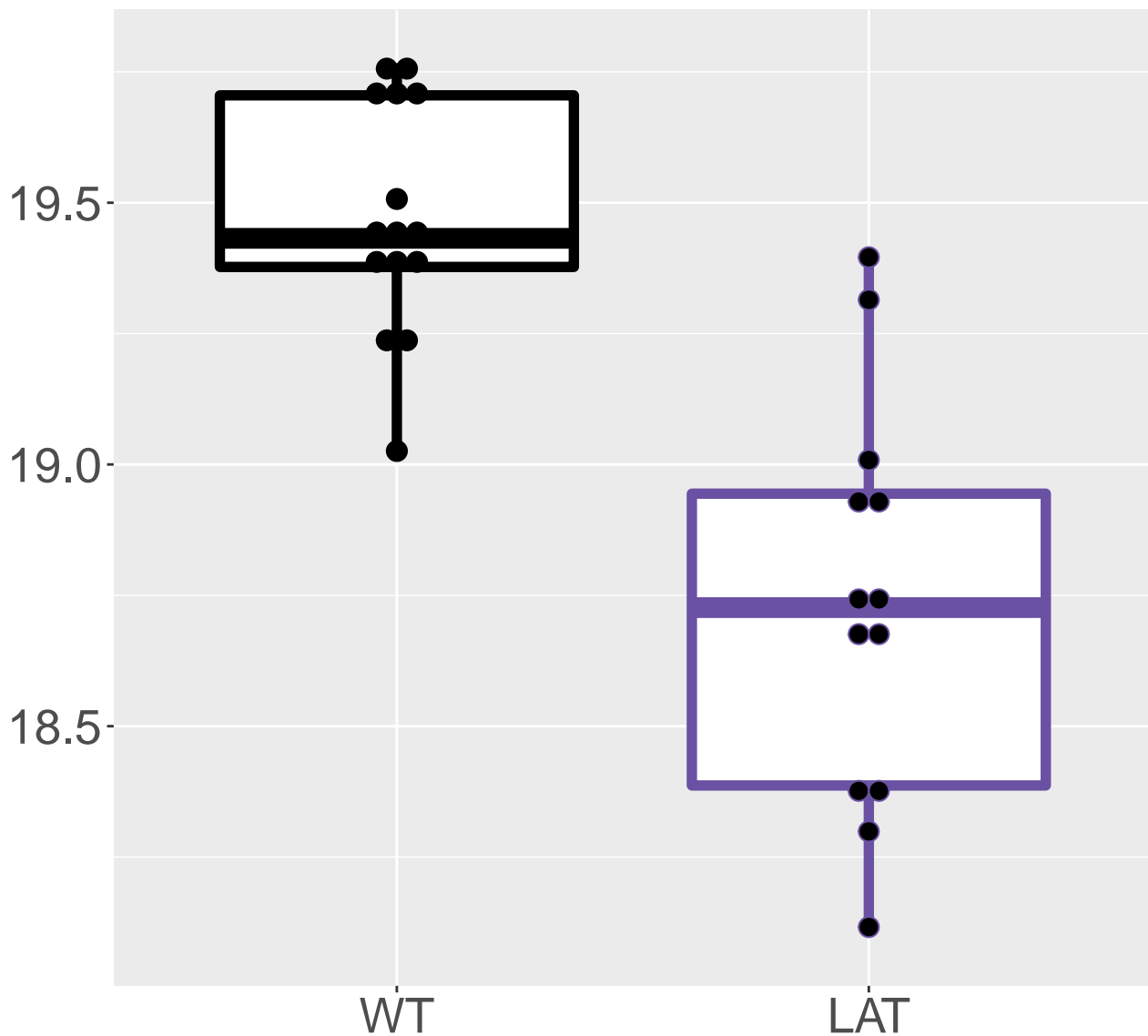
**M826.2842T611.01**

**FDR =  $4.2e-05$ , FC = -1.1**



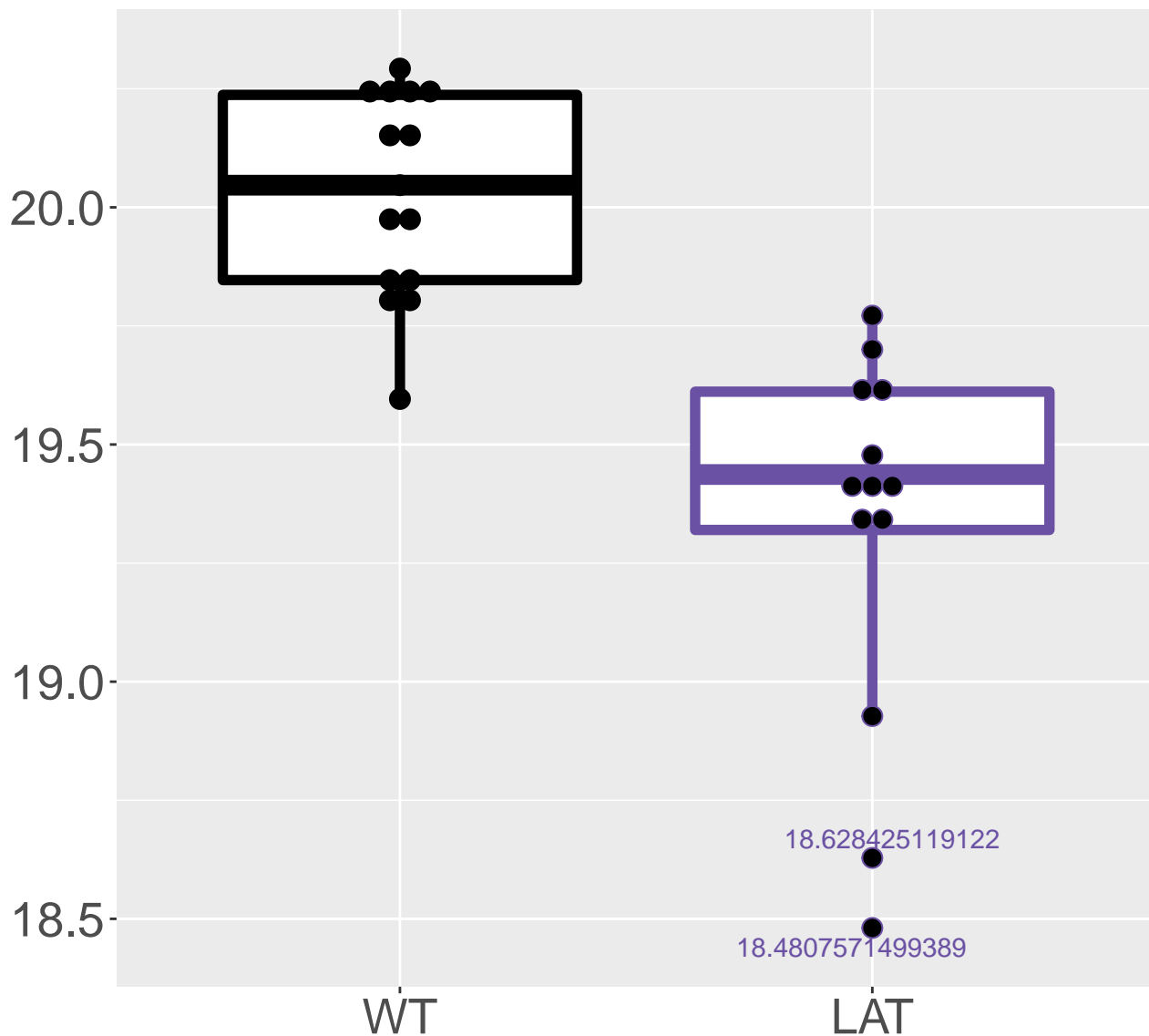
**M635.2524T570.89**

**FDR =  $4.4e-05$ , FC =  $-0.74$**



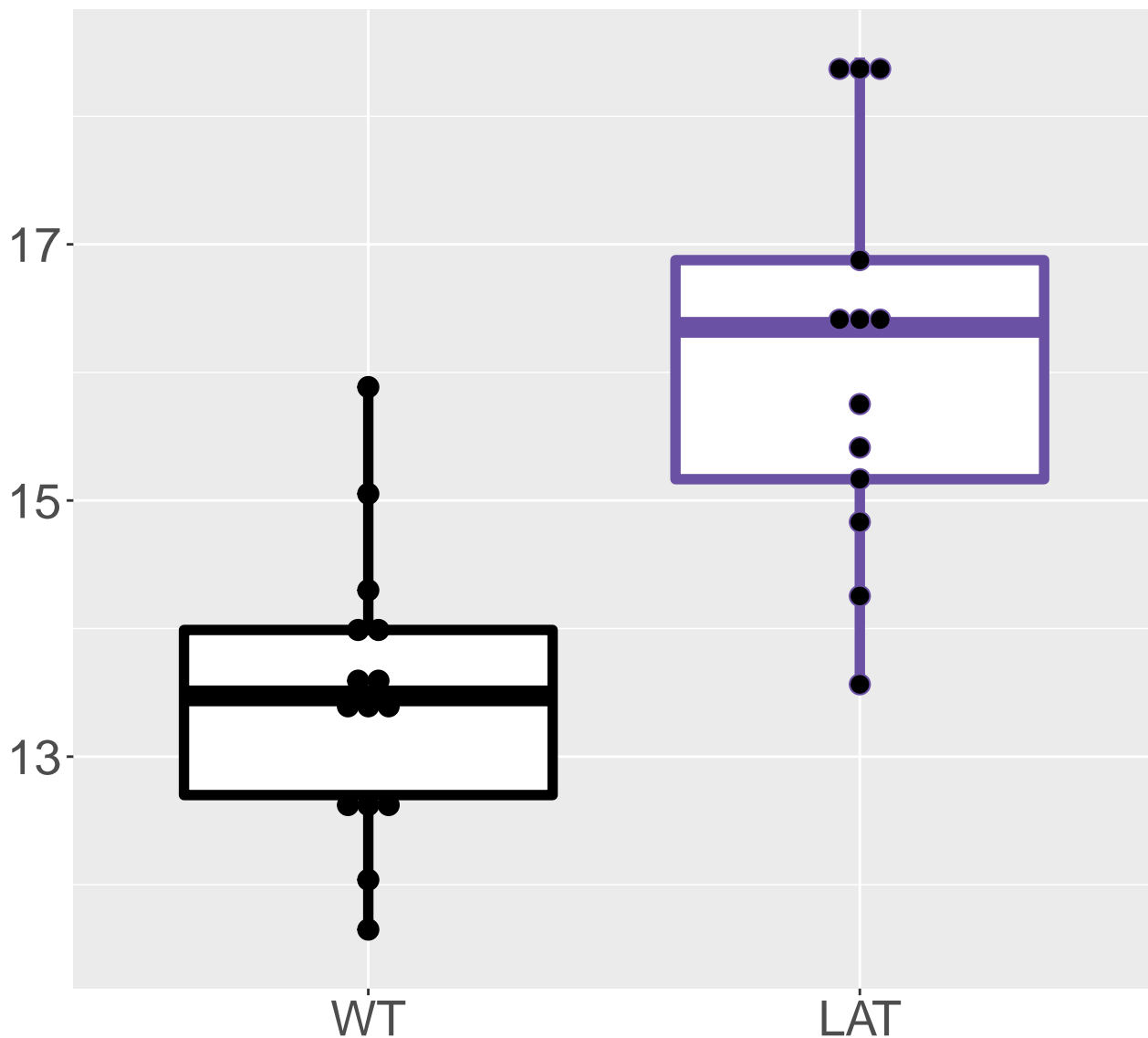
**M204.0858T240.08**

**FDR =  $4.4e-05$ , FC =  $-0.71$**



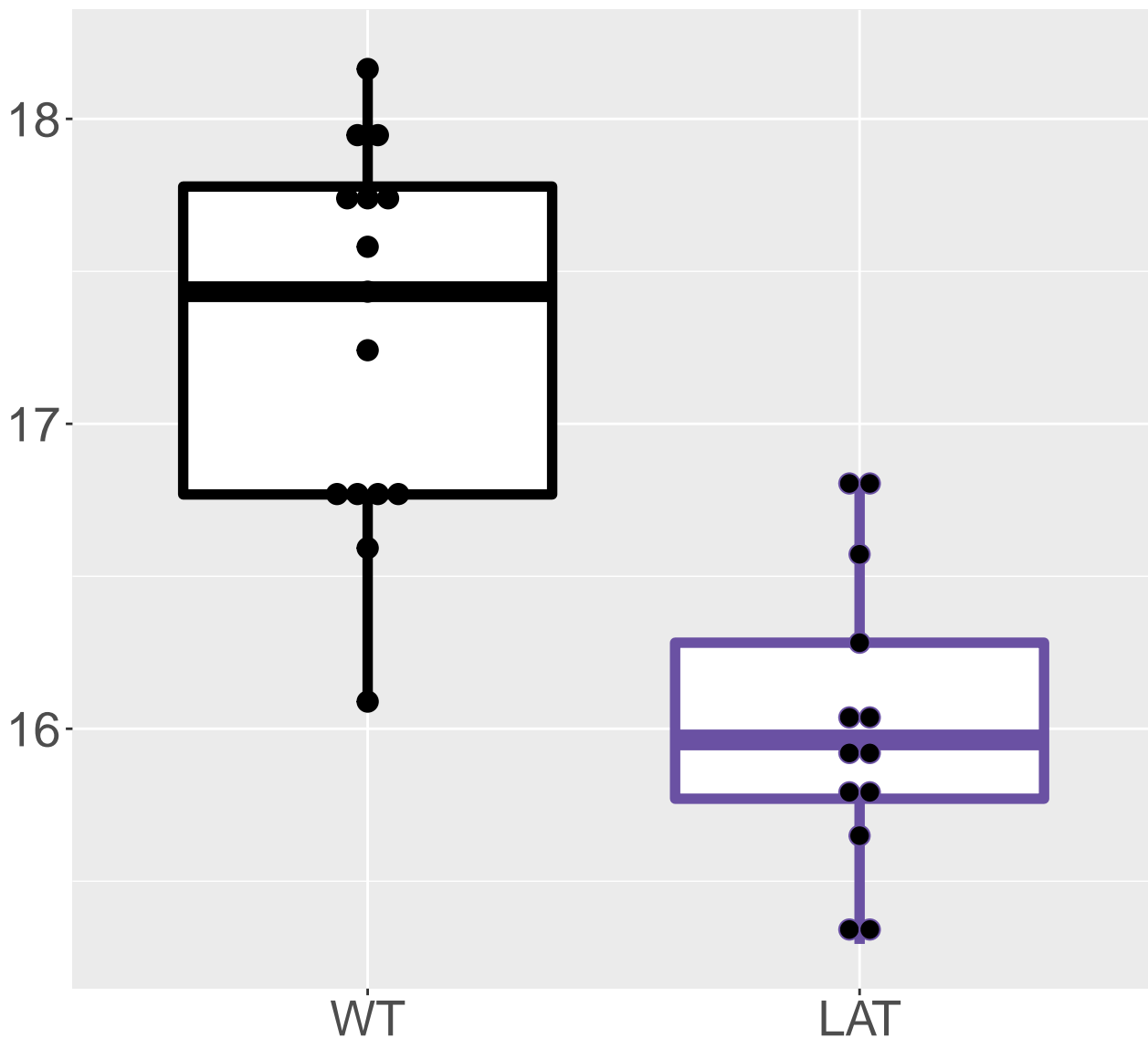
**M561.1119T491.12**

**FDR =  $4.5e-05$ , FC = 2.7, sex\***



**M939.2937T633.84**

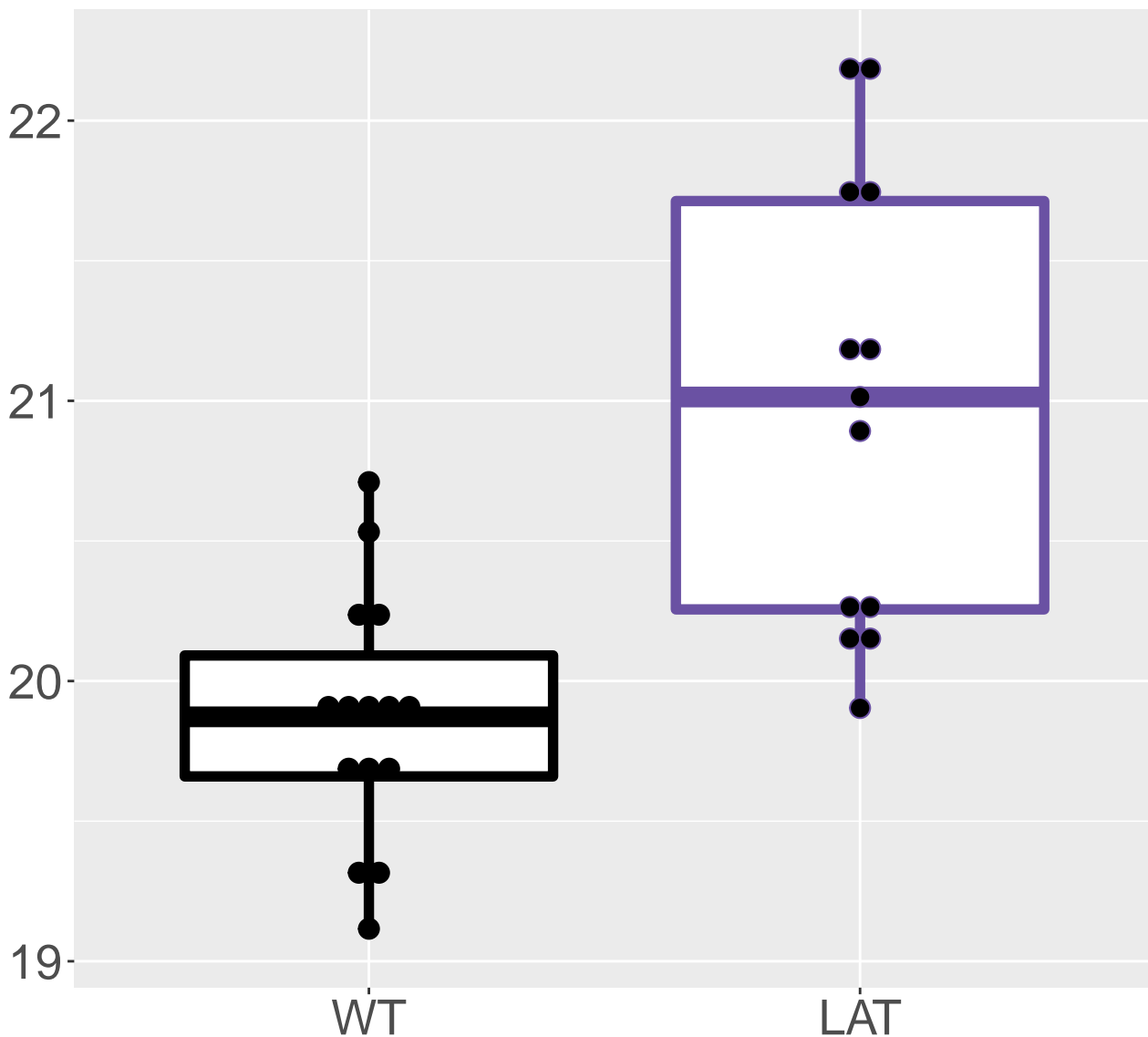
**FDR =  $4.5e-05$ , FC =  $-1.3$**





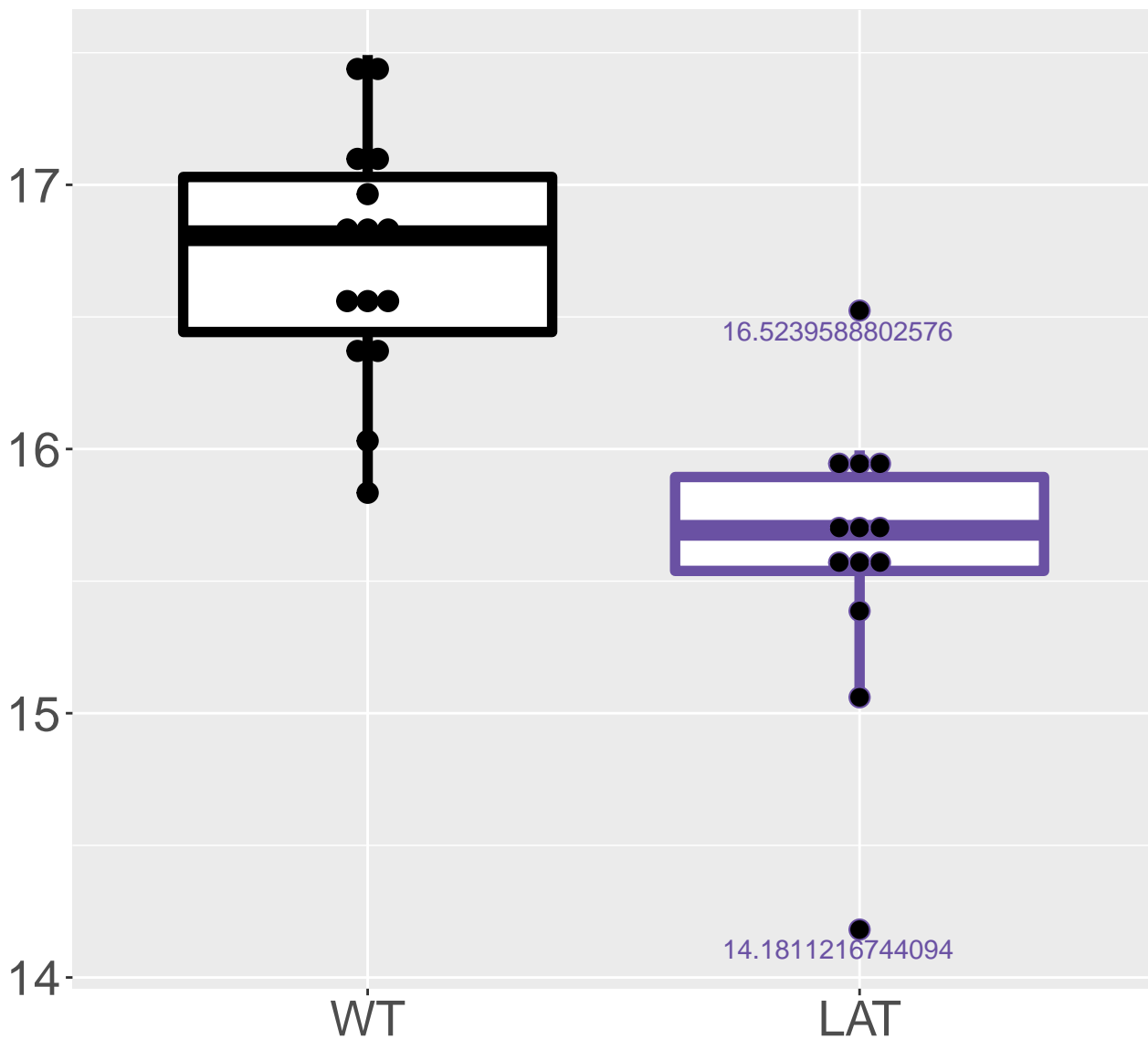
**M356.9998T556.54**

**FDR = 4.5e-05, FC = 1.1, sex\*\***



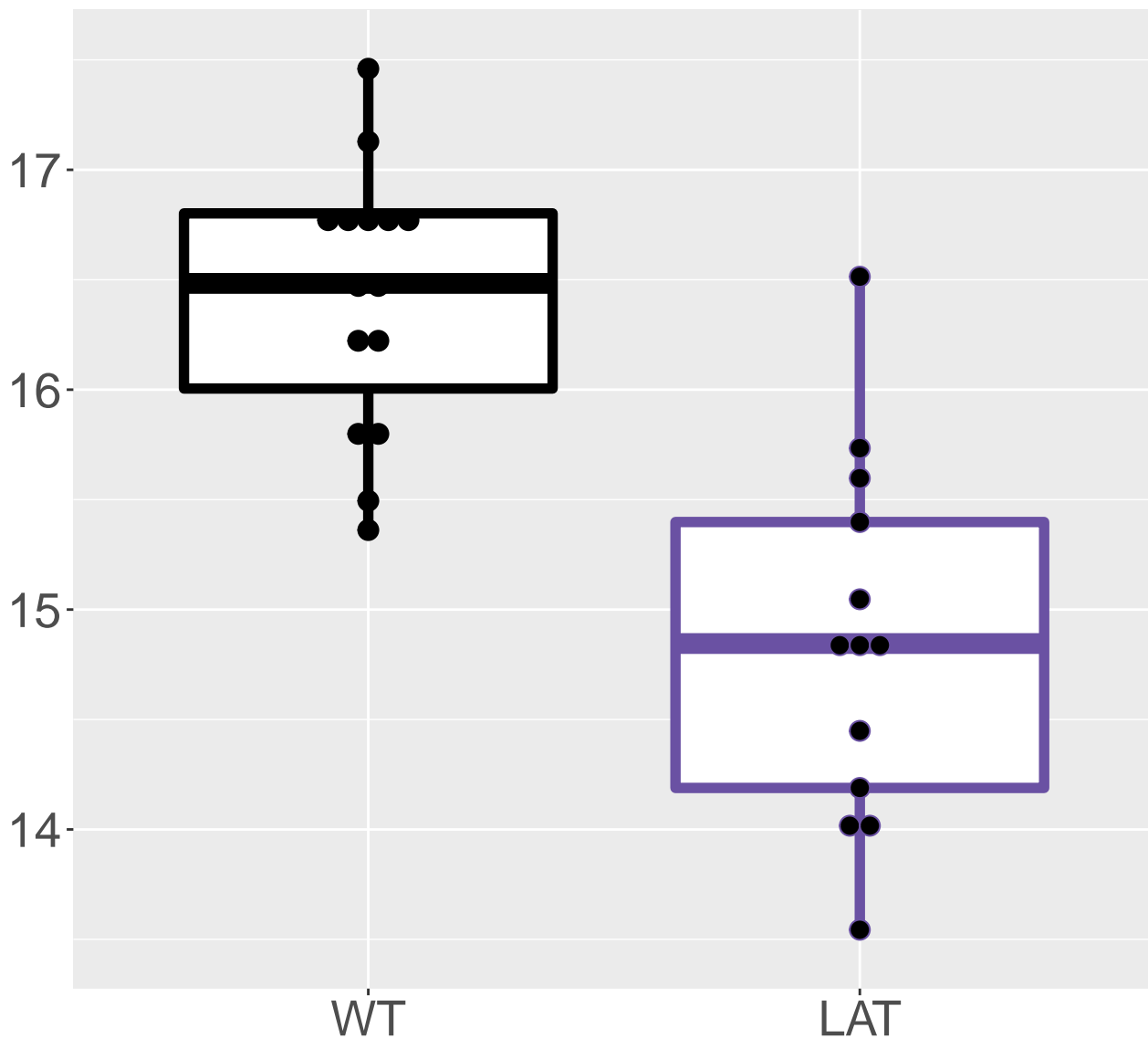
**M280.0864T209.15**

**FDR =  $4.5e-05$ , FC =  $-1.1$**



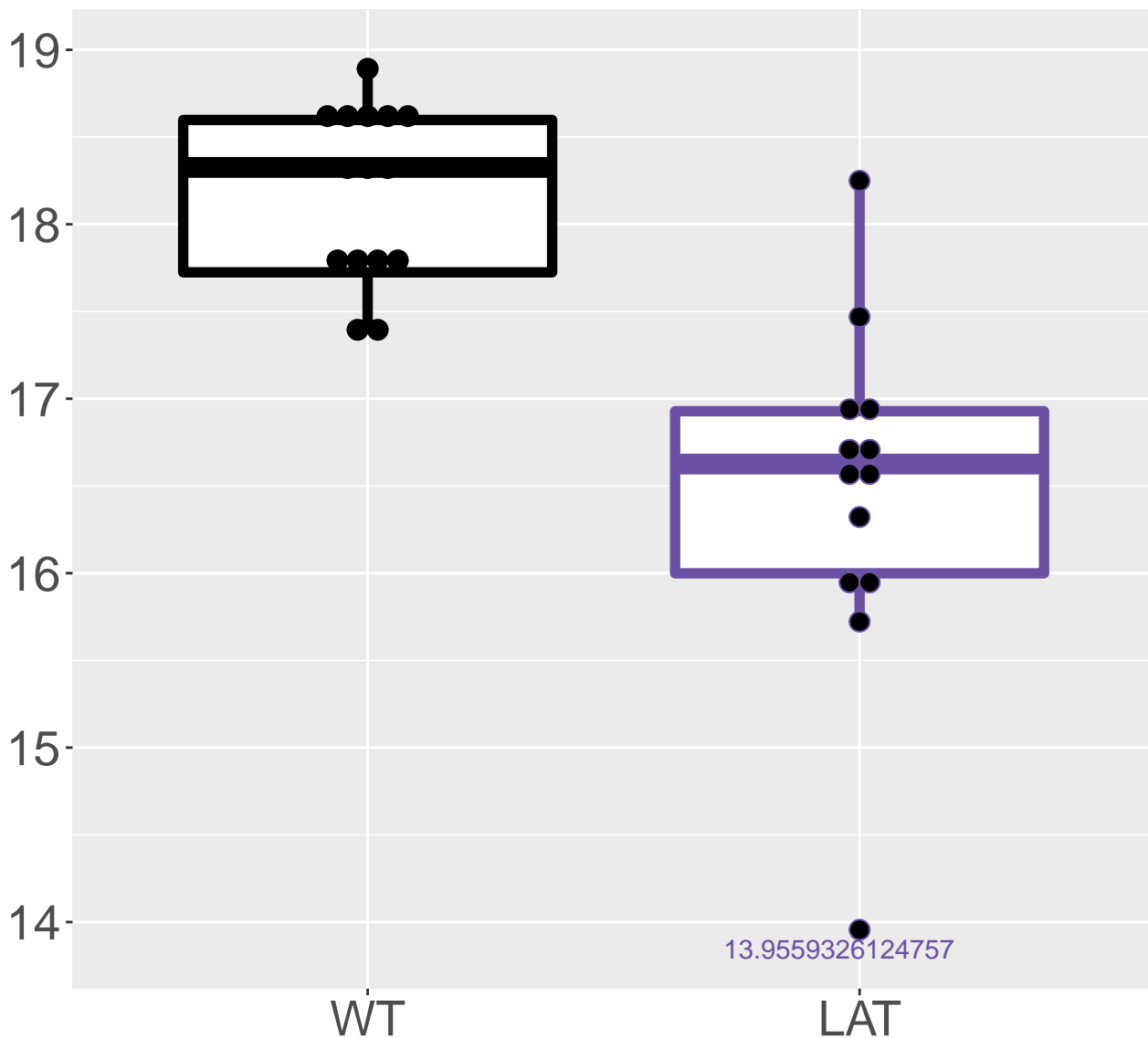
**M367.6226T559.37**

**FDR =  $4.6e-05$ , FC =  $-1.6$**



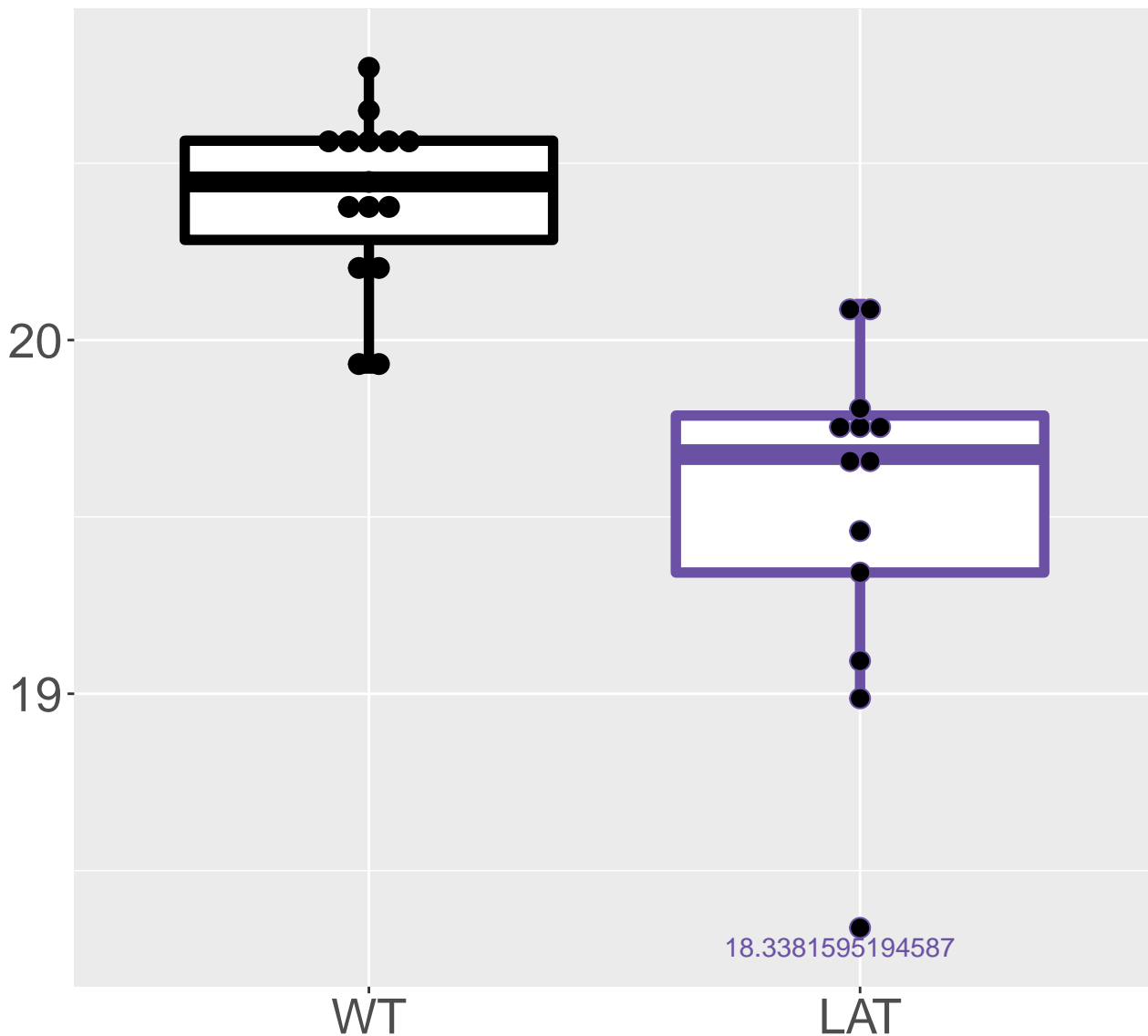
**M566.1576T577.74\_1**

**FDR = 4.7e-05, FC = -1.7**



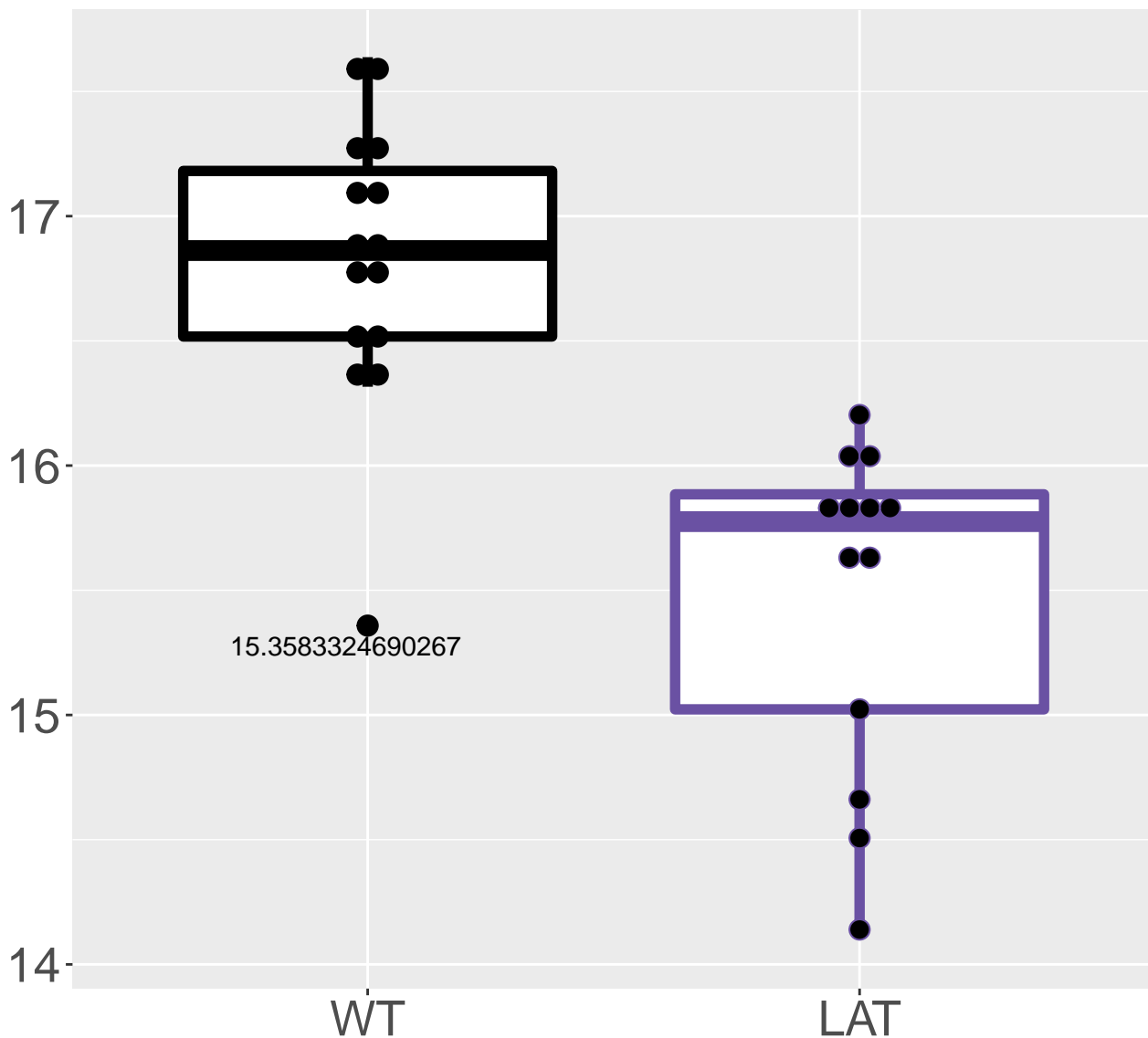
**M583.4737T77.71**

**FDR =  $4.7\text{e-}05$ , FC =  $-0.88$**



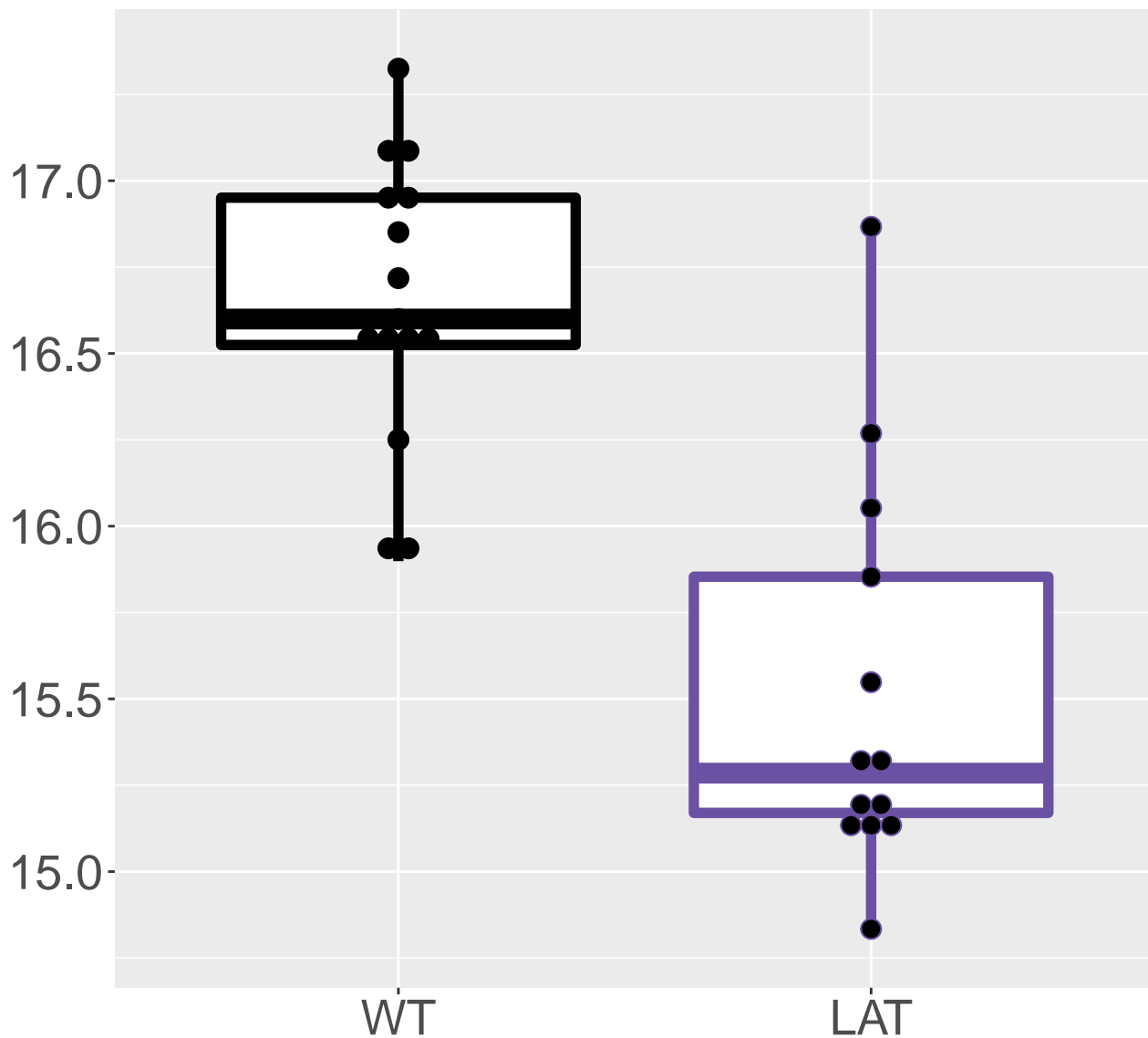
**M396.0472T543.3**

**FDR =  $4.7e-05$ , FC = -1.3**



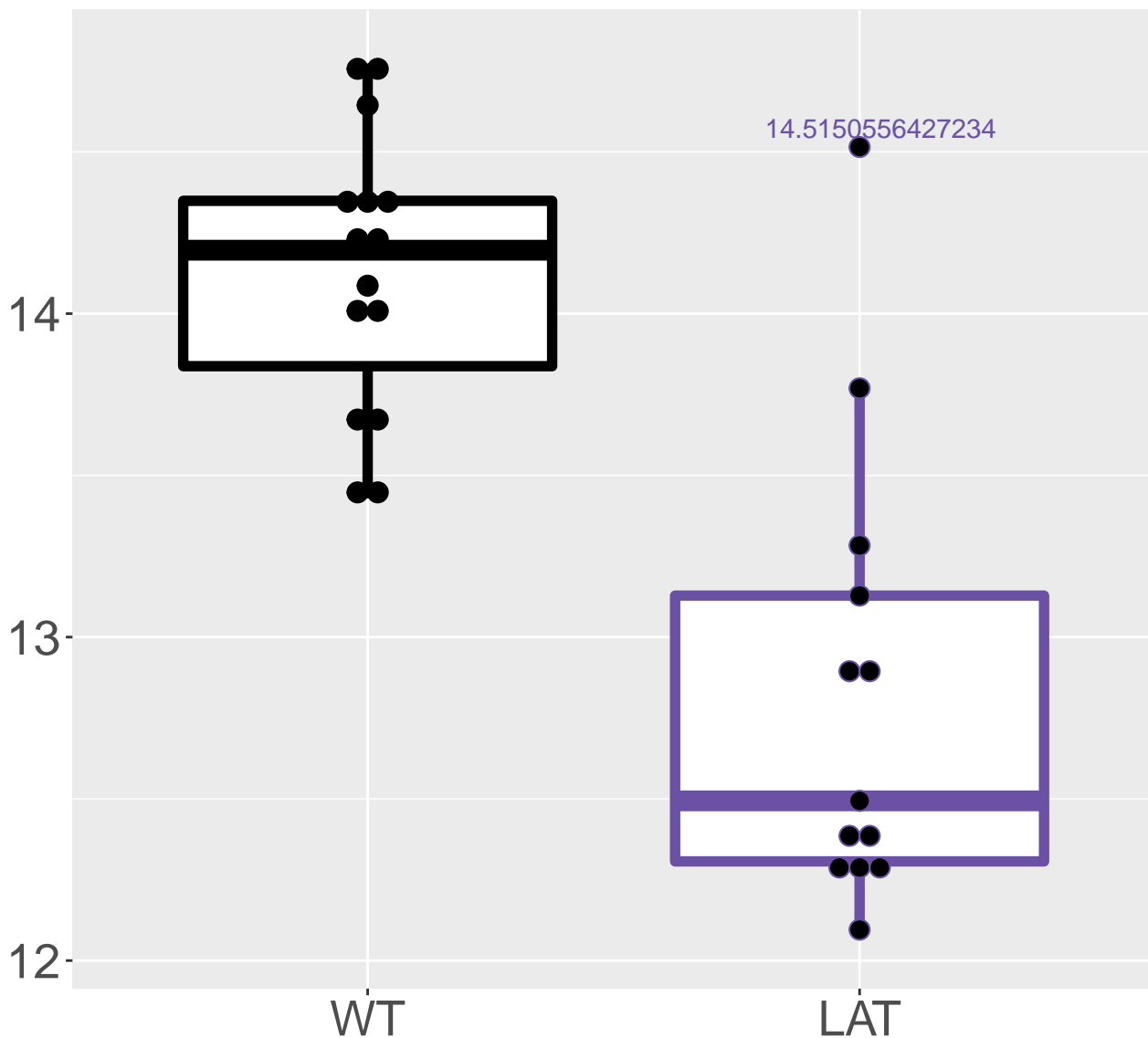
**M849.2623T675.34**

**FDR =  $4.8e-05$ , FC =  $-1.1$**



**M491.4899T668.71**

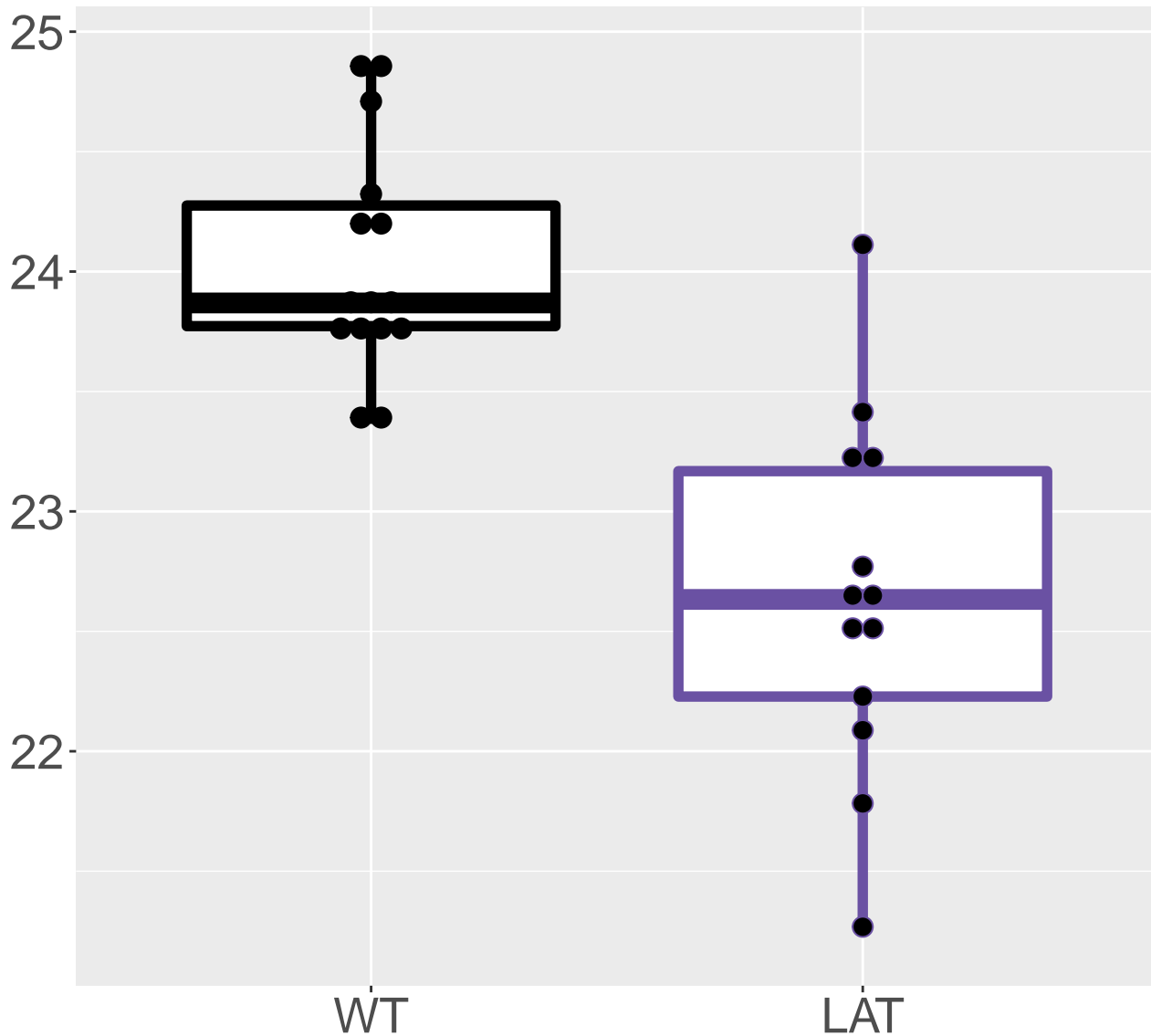
**FDR =  $4.9\text{e-}05$ , FC = -1.3**



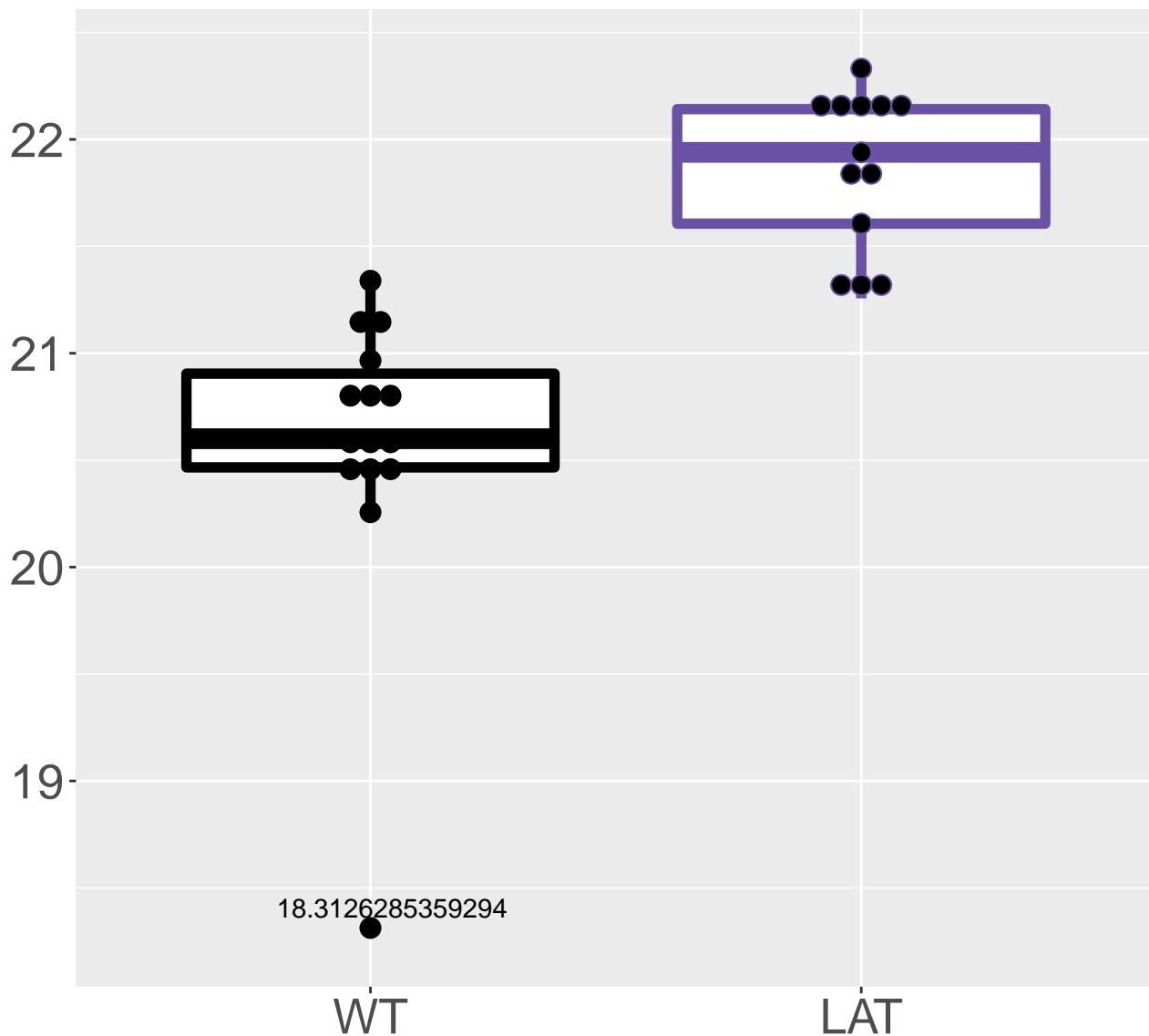


**M488.163T524.21**

**FDR =  $4.9\text{e-}05$ , FC = -1.4**

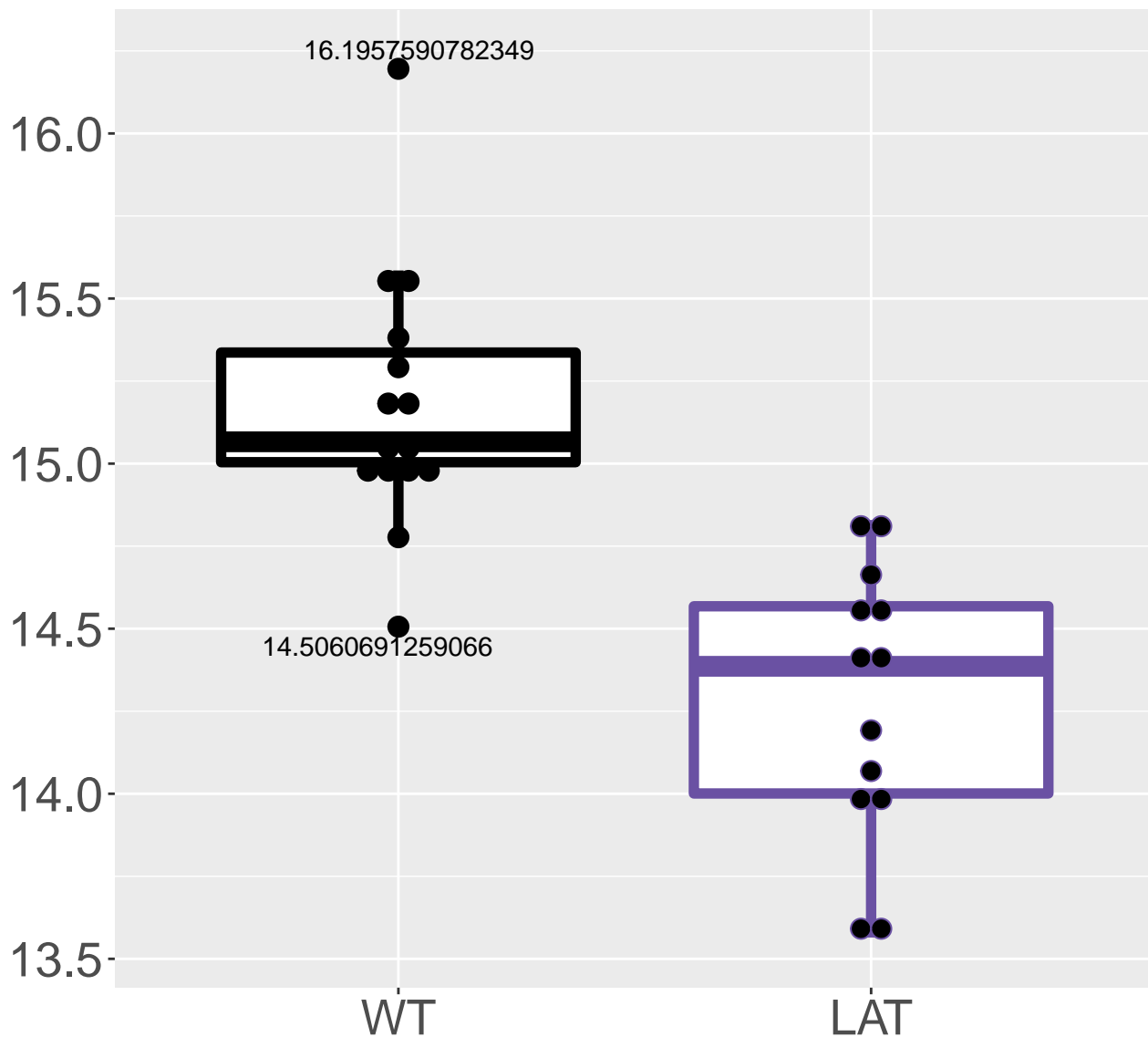


**M383.1149T369.4**  
**FDR = 5e-05, FC = 1.3**



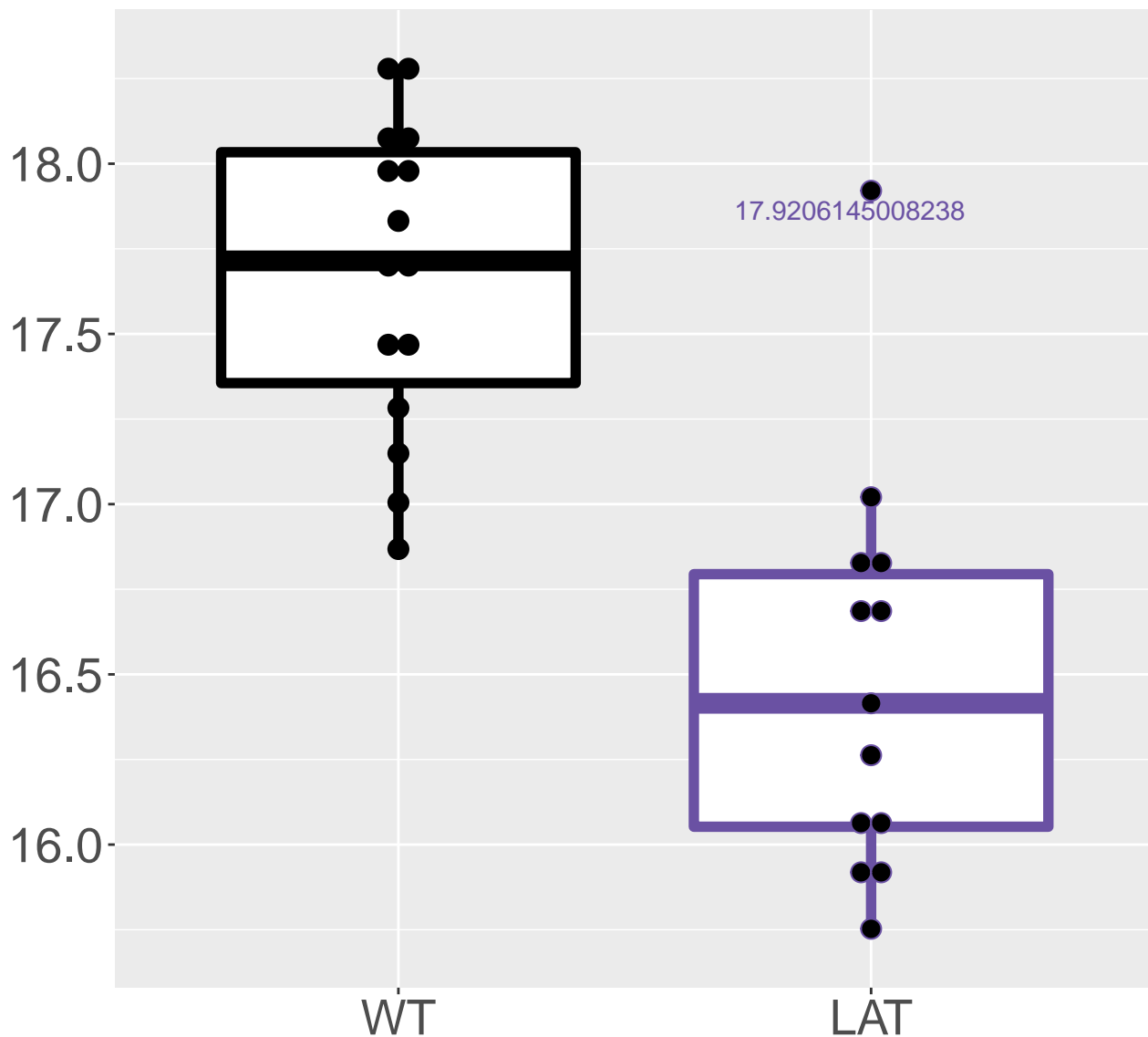
**M197.0667T387.27**

**FDR =  $5.4e-05$ , FC =  $-0.9$**

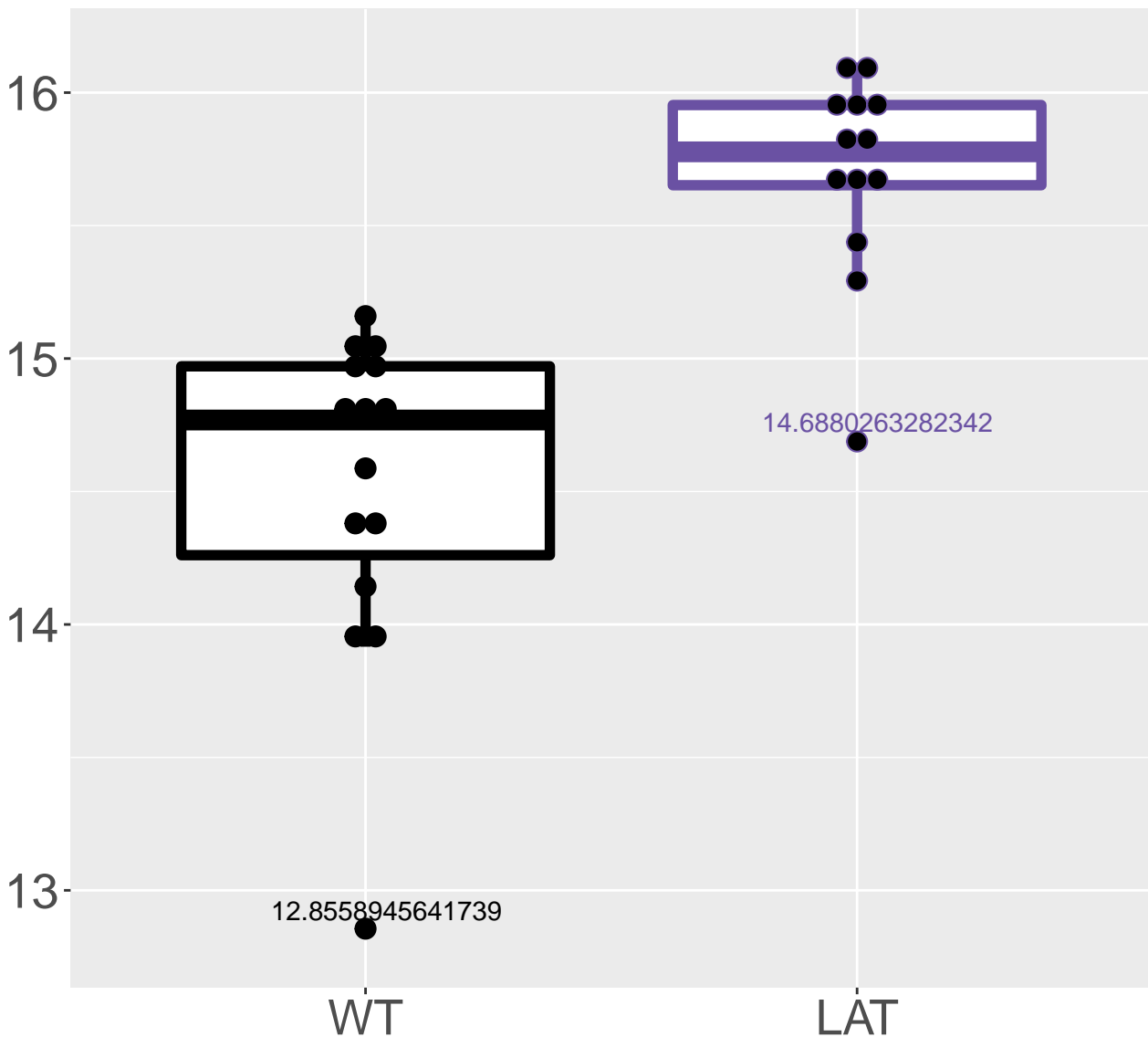


**M541.1357T578.39**

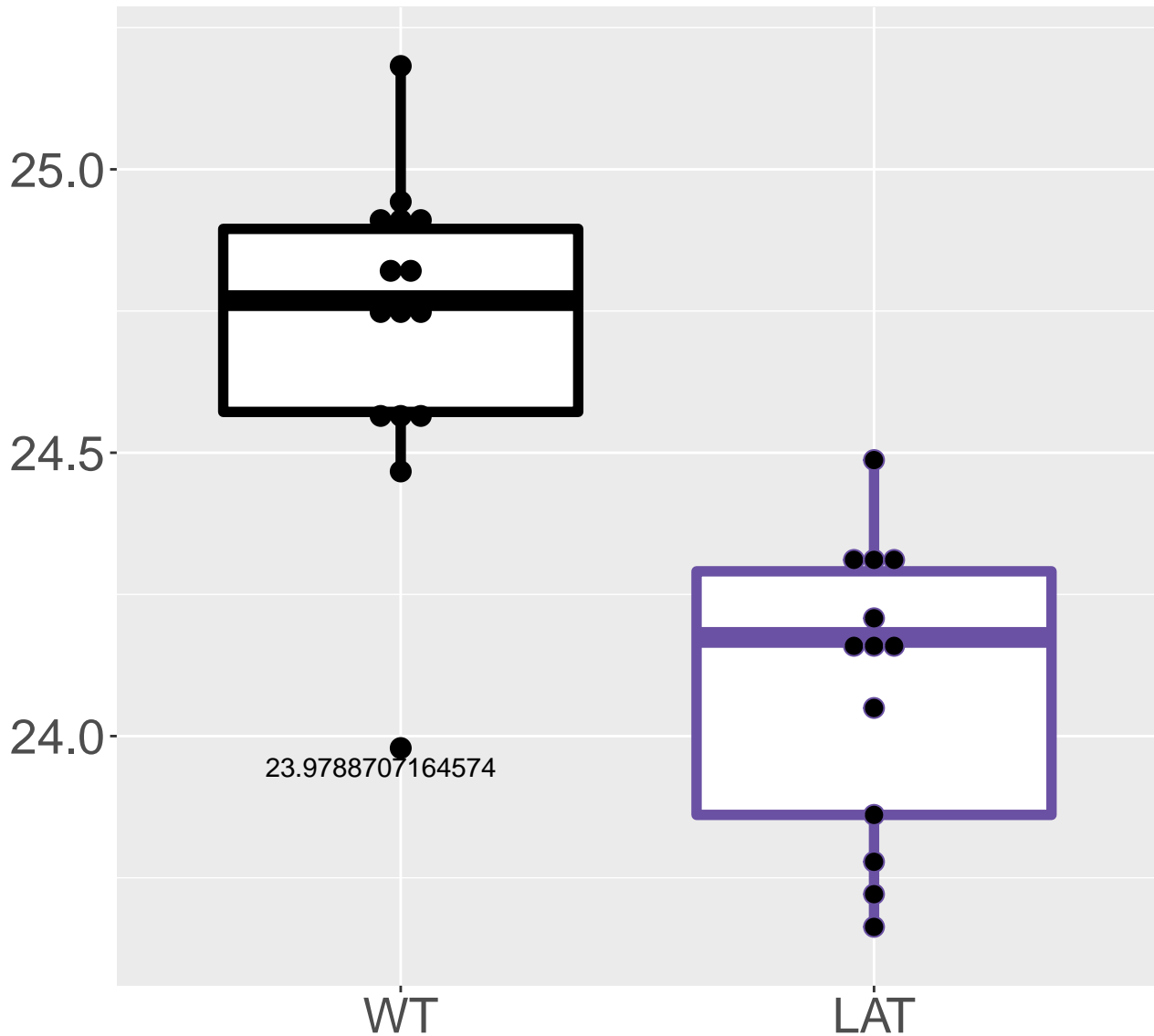
**FDR =  $5.5e-05$ , FC =  $-1.2$**



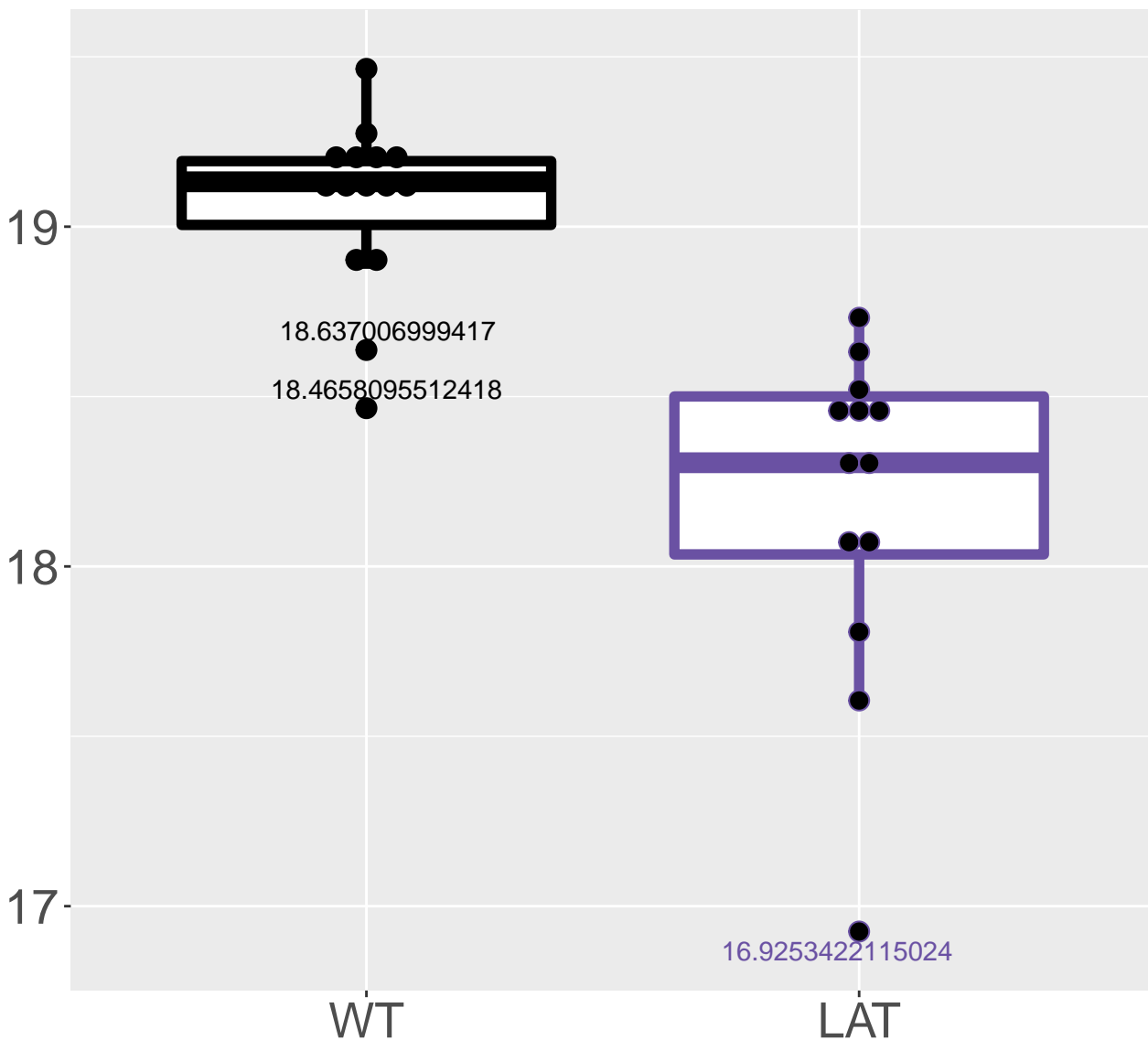
**M303.5069T620.41**  
**FDR = 5.5e-05, FC = 1.2**



**L-Methionine;Methionine|S-Ethyl-L-cysteine**  
**FDR = 5.5e-05, FC = -0.63**

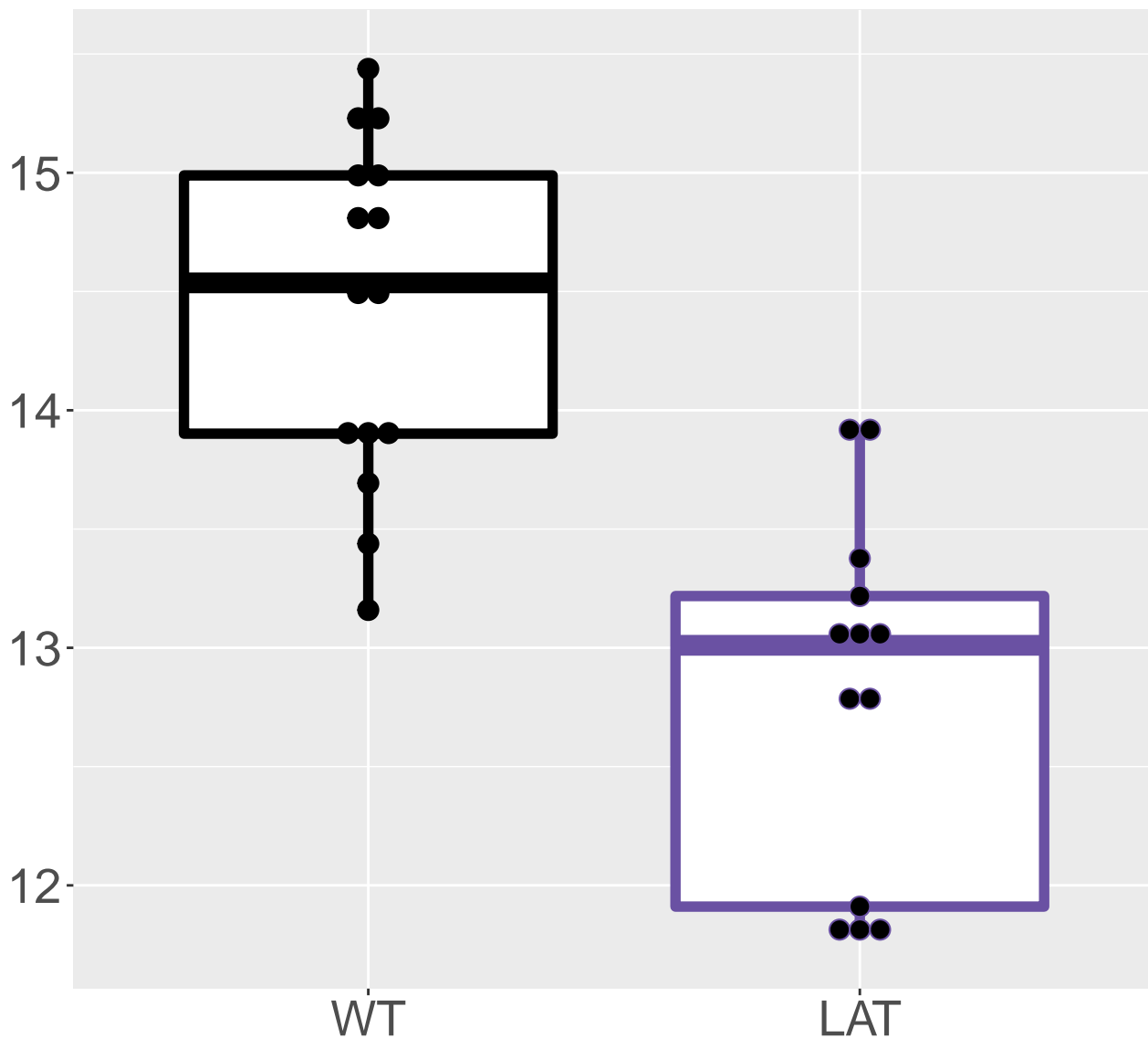


**FDR = 5.7e-05, FC = -0.89**



**M940.7978T634.55**

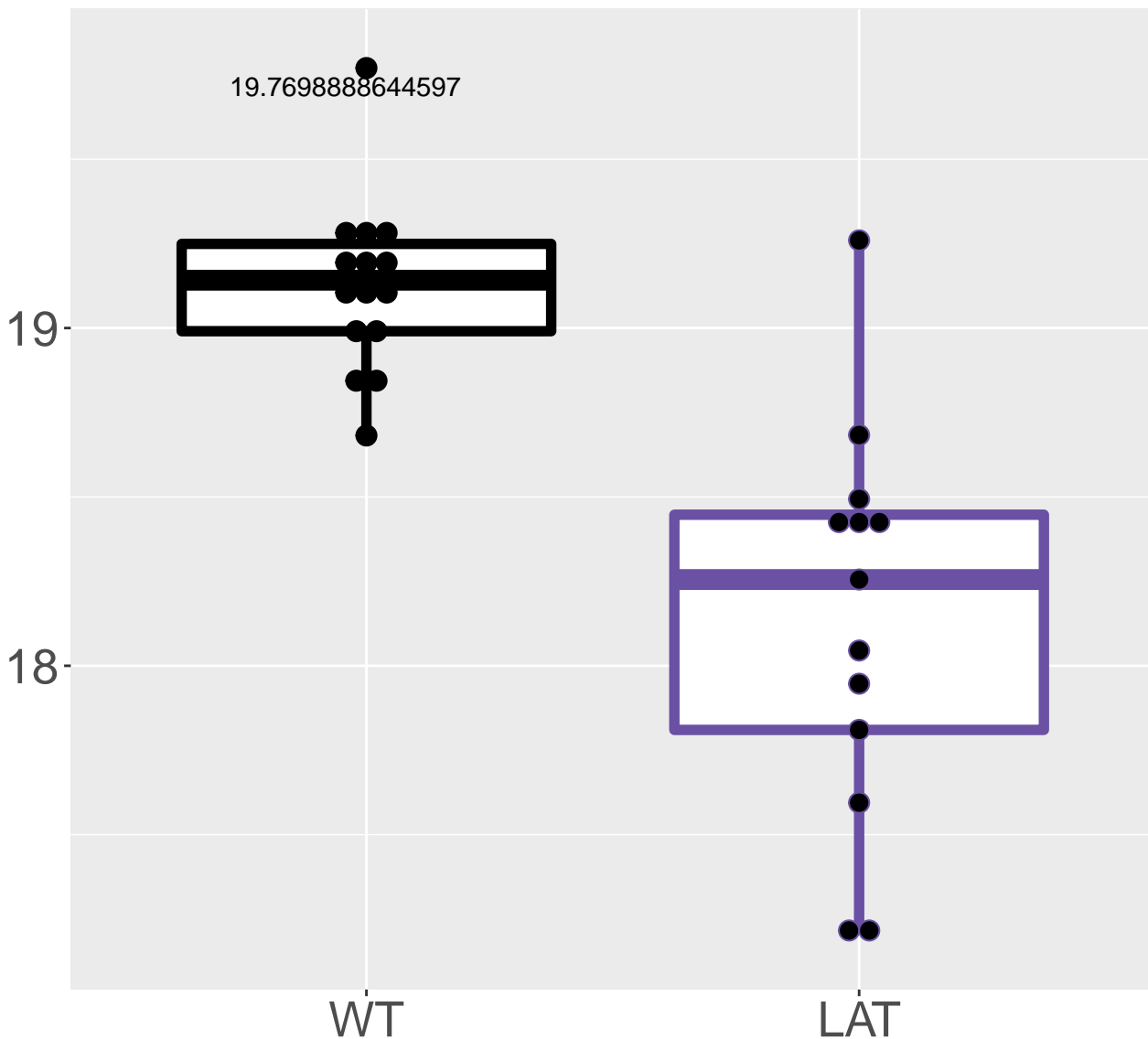
**FDR =  $5.8e-05$ , FC =  $-1.6$**





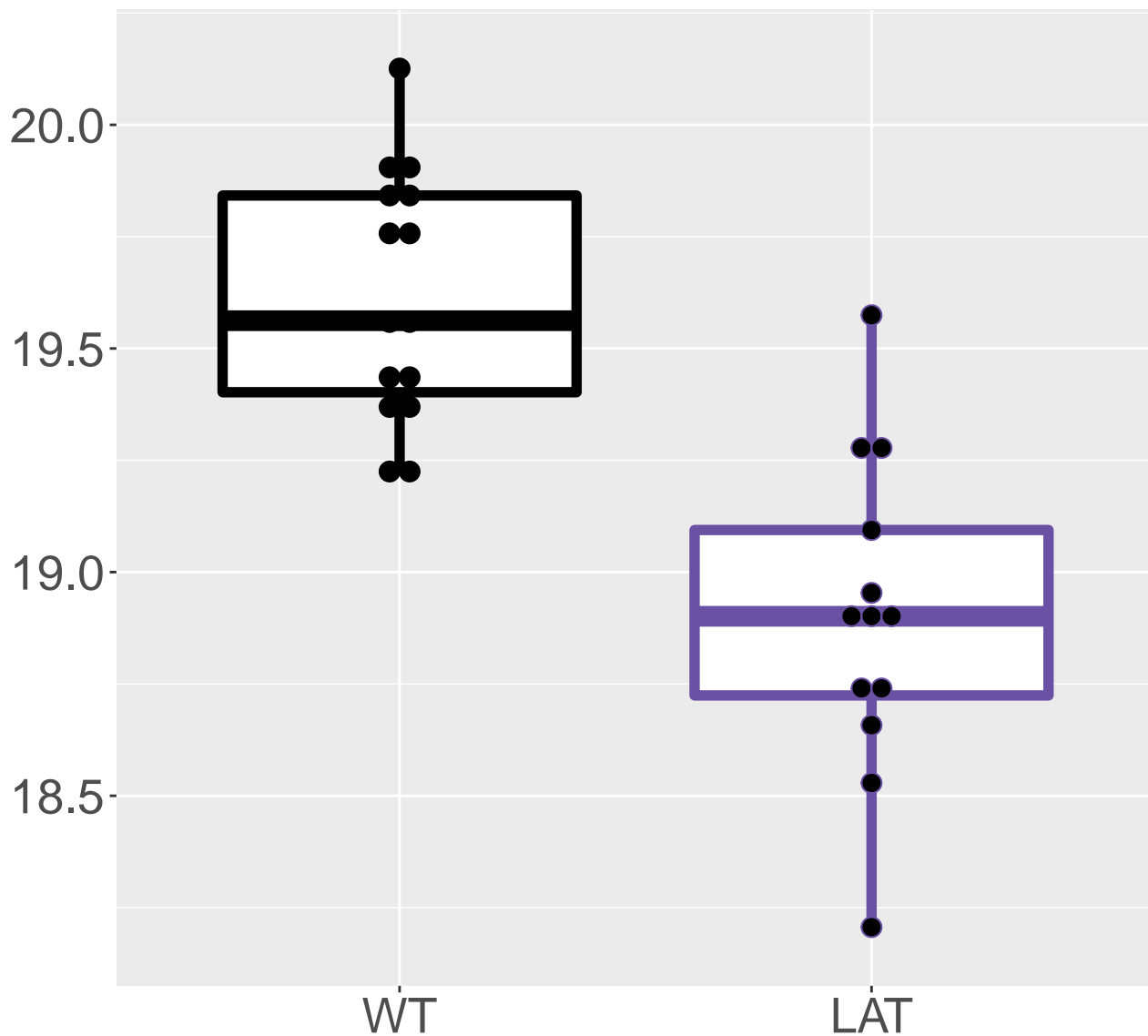
**M266.1251T297.86**

**FDR = 5.9e-05, FC = -0.98**

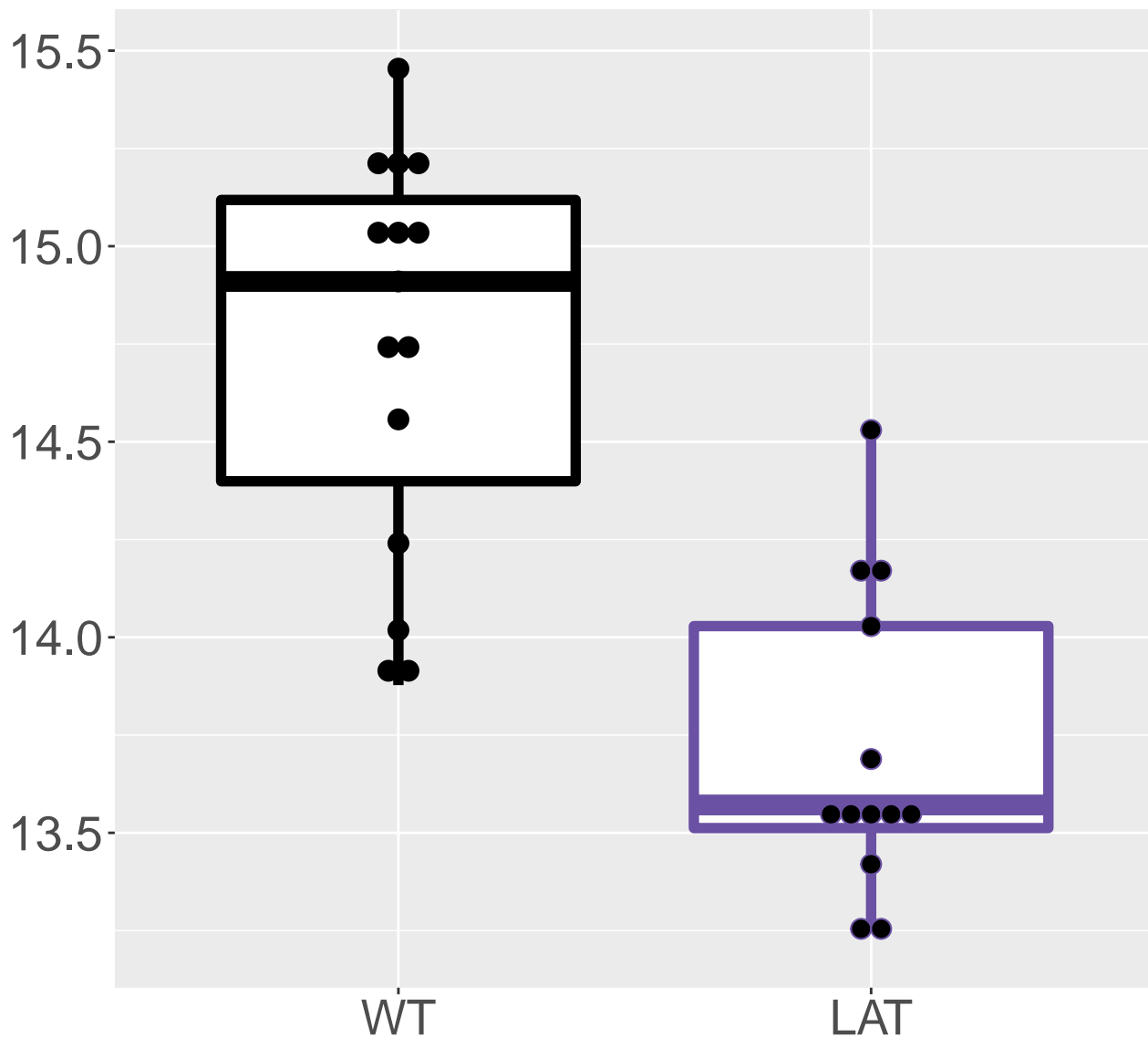


**M811.3212T602.66**

**FDR =  $5.9\text{e-}05$ , FC =  $-0.72$**

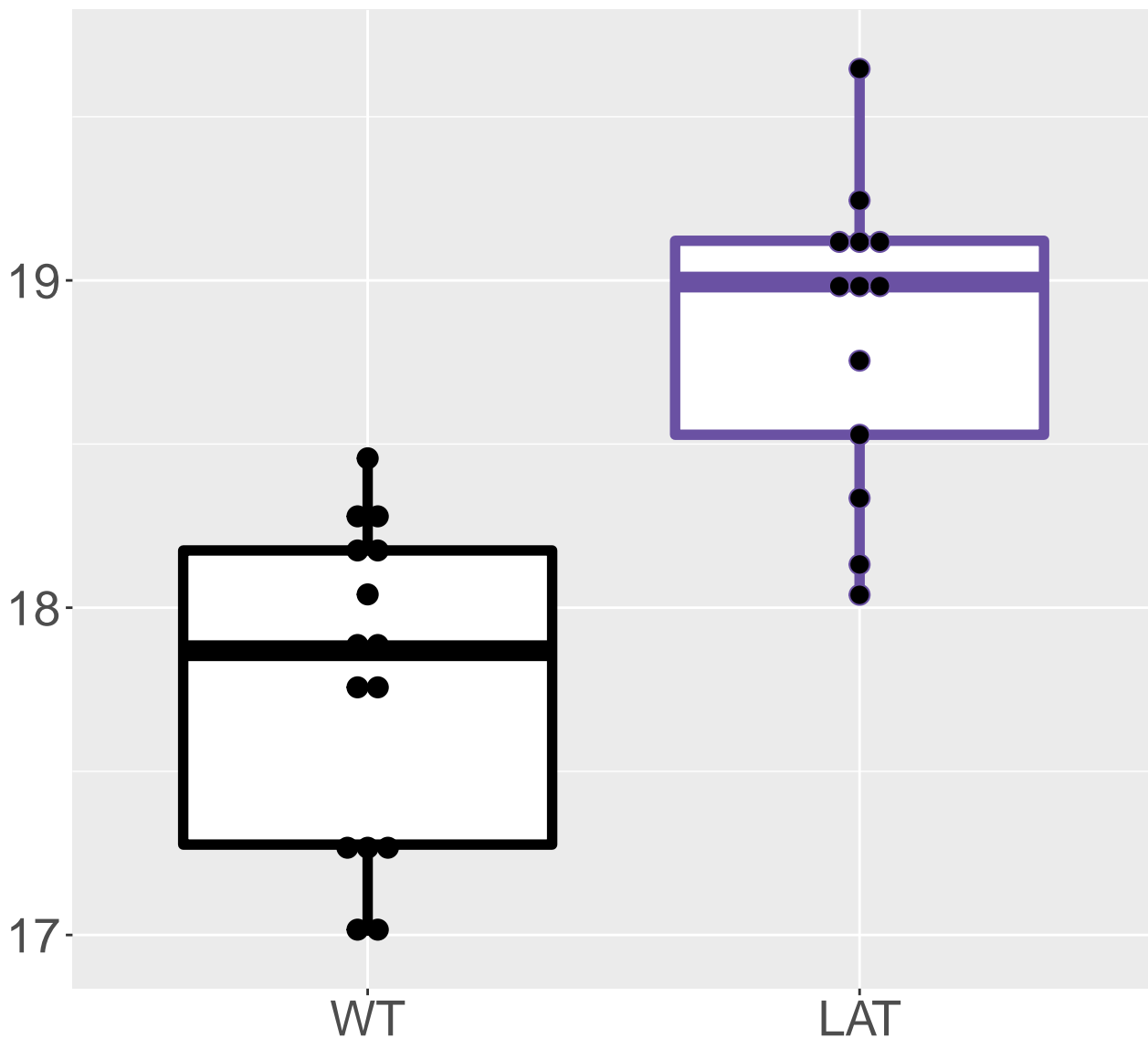


**M354.112T626.47\_2**  
**FDR = 6.1e-05, FC = -1**



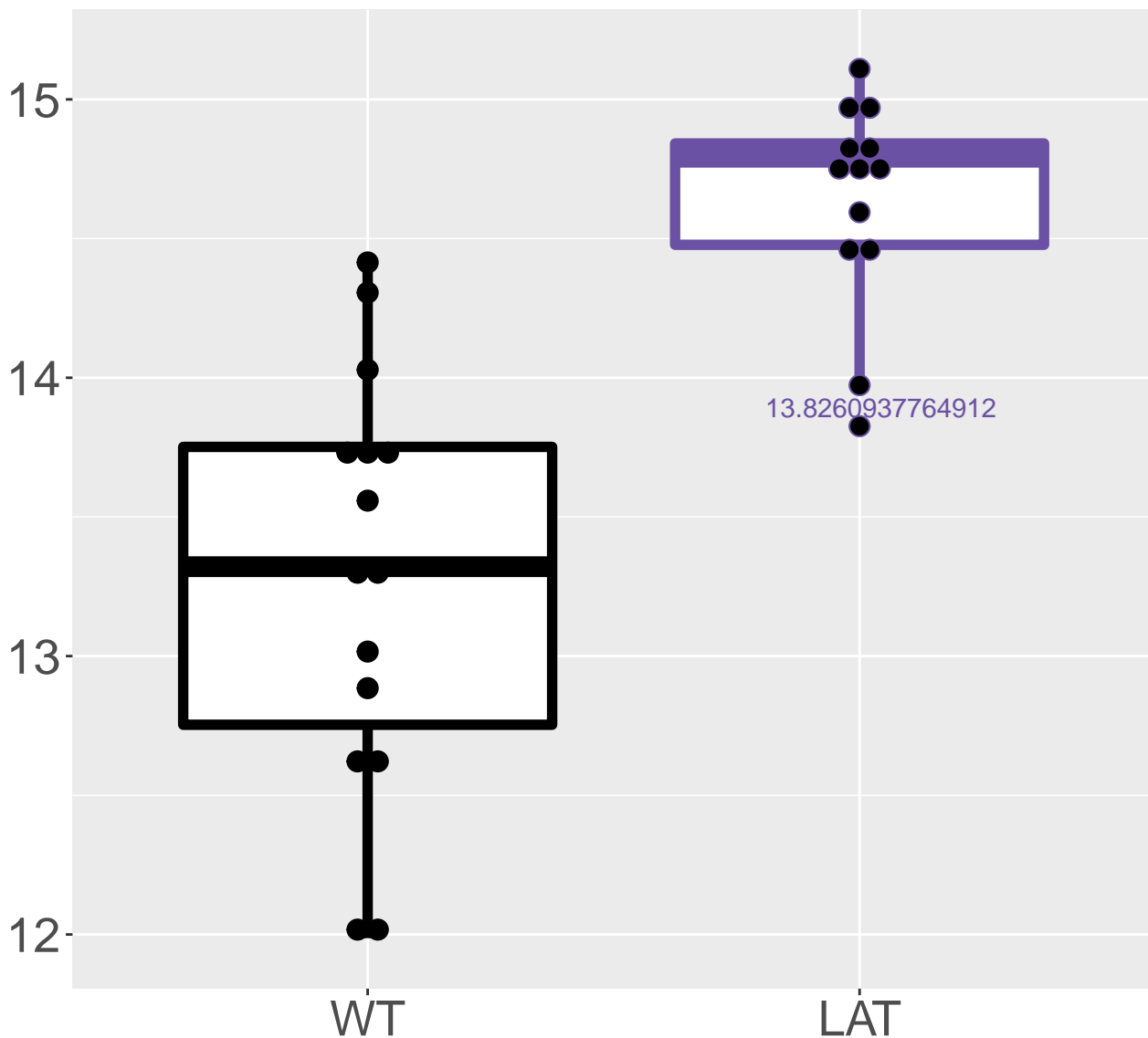
**M453.1023T517.64**

**FDR =  $6.2e-05$ , FC = 1.1**



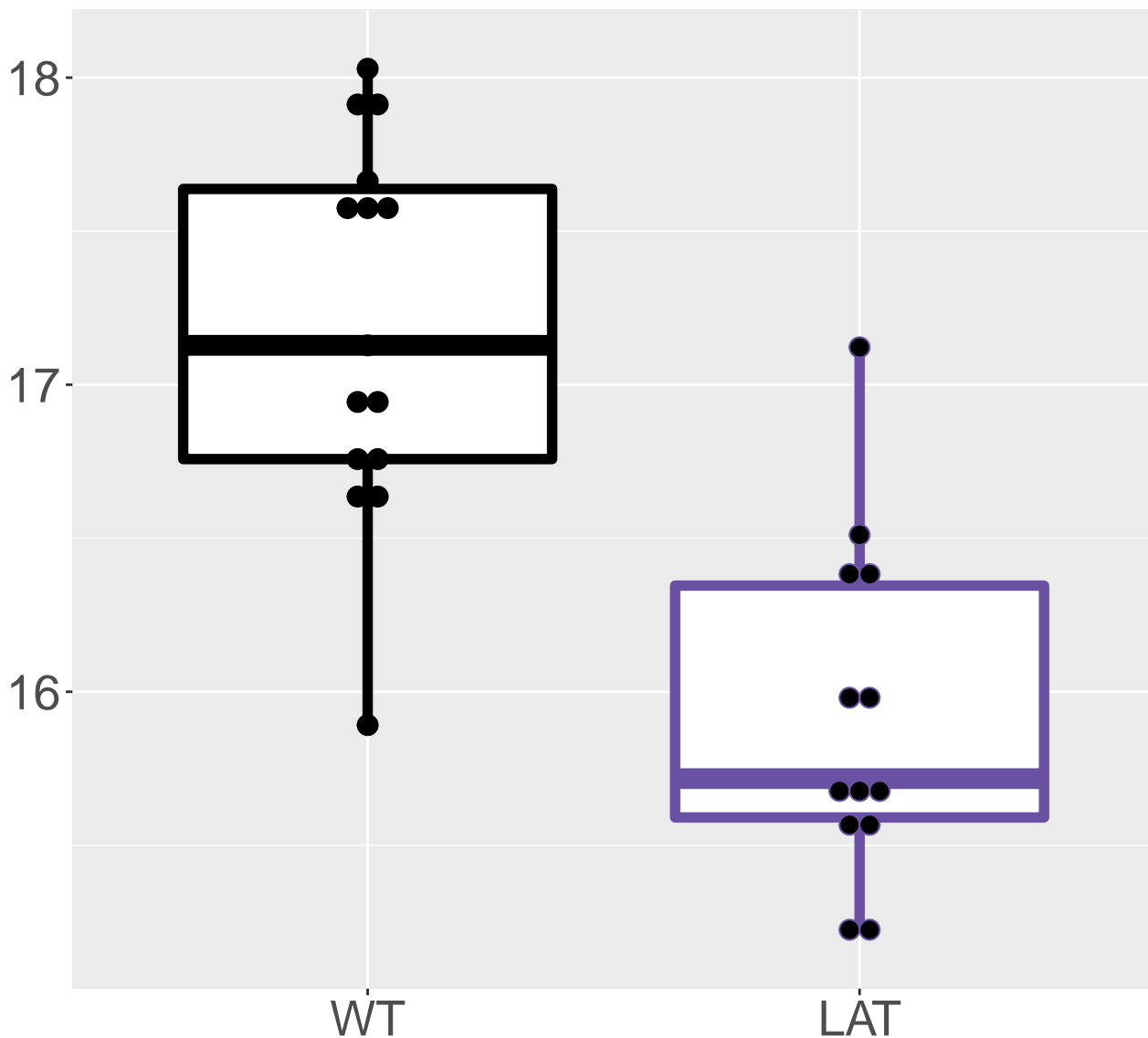
**M369.5906T628.13**

**FDR =  $6.2e-05$ , FC = 1.4**



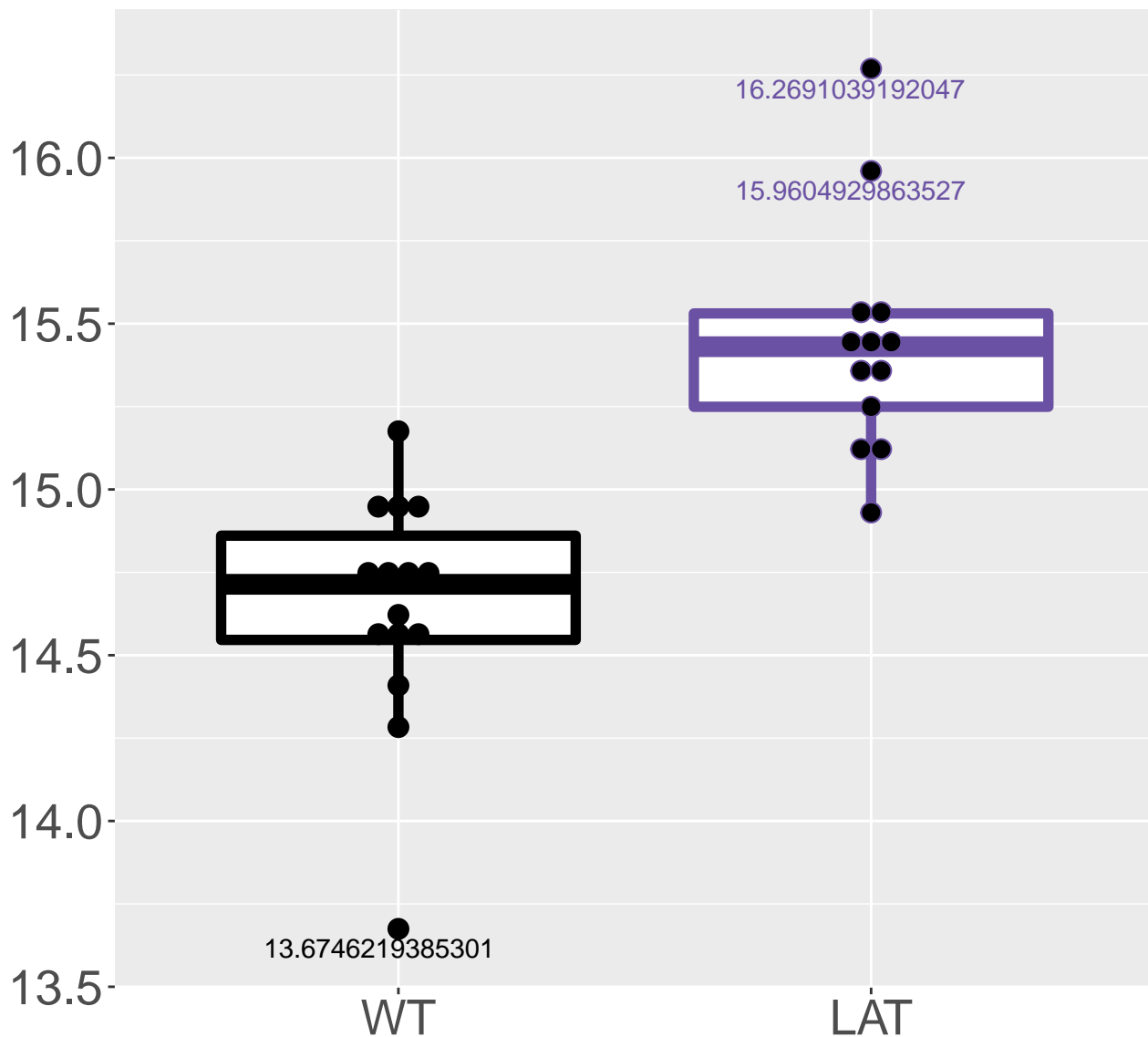
**M908.2941T634.53**

**FDR =  $6.2e-05$ , FC =  $-1.3$**



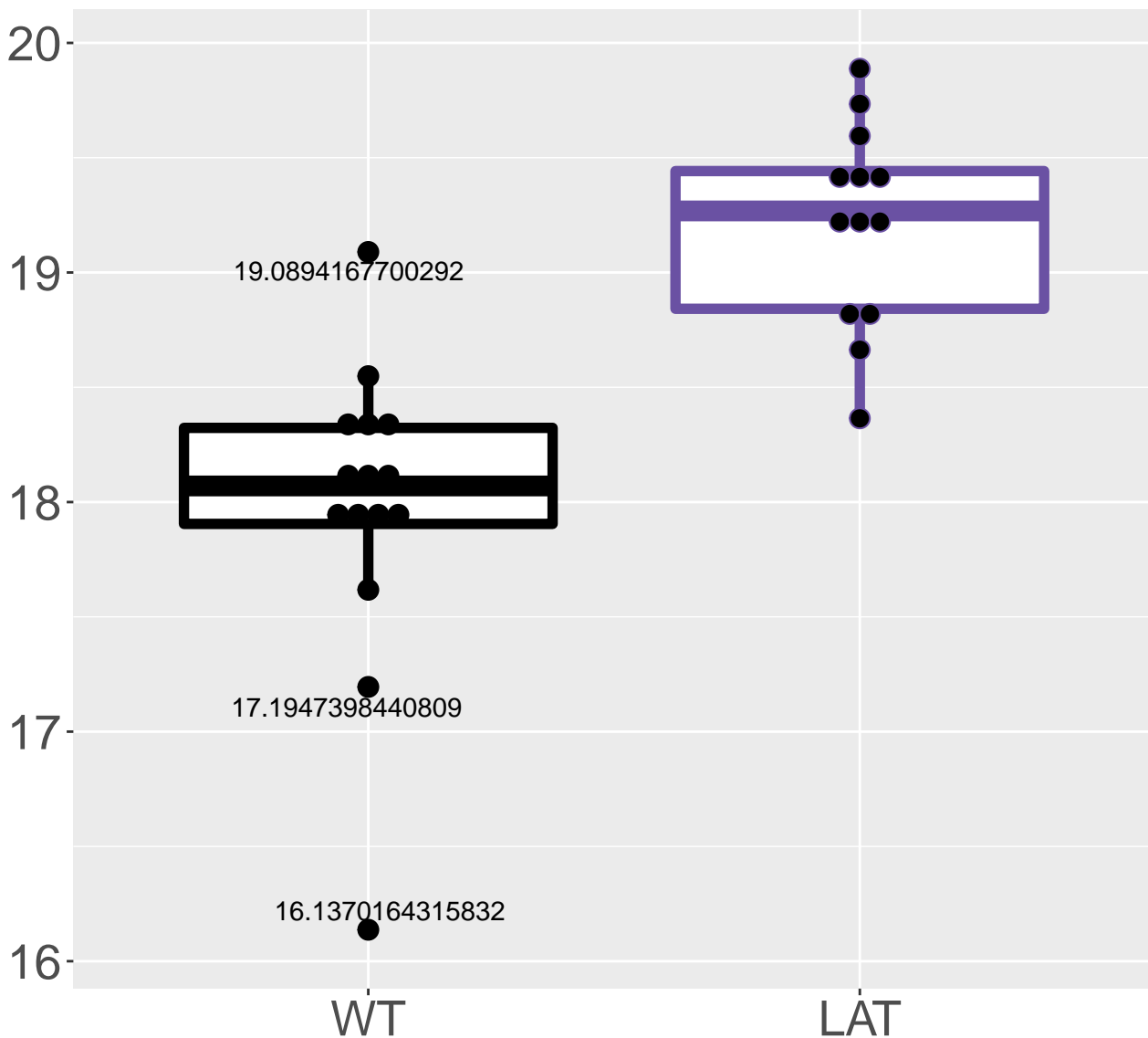
**M415.1465T560.88**

**FDR = 6.2e-05, FC = 0.8**



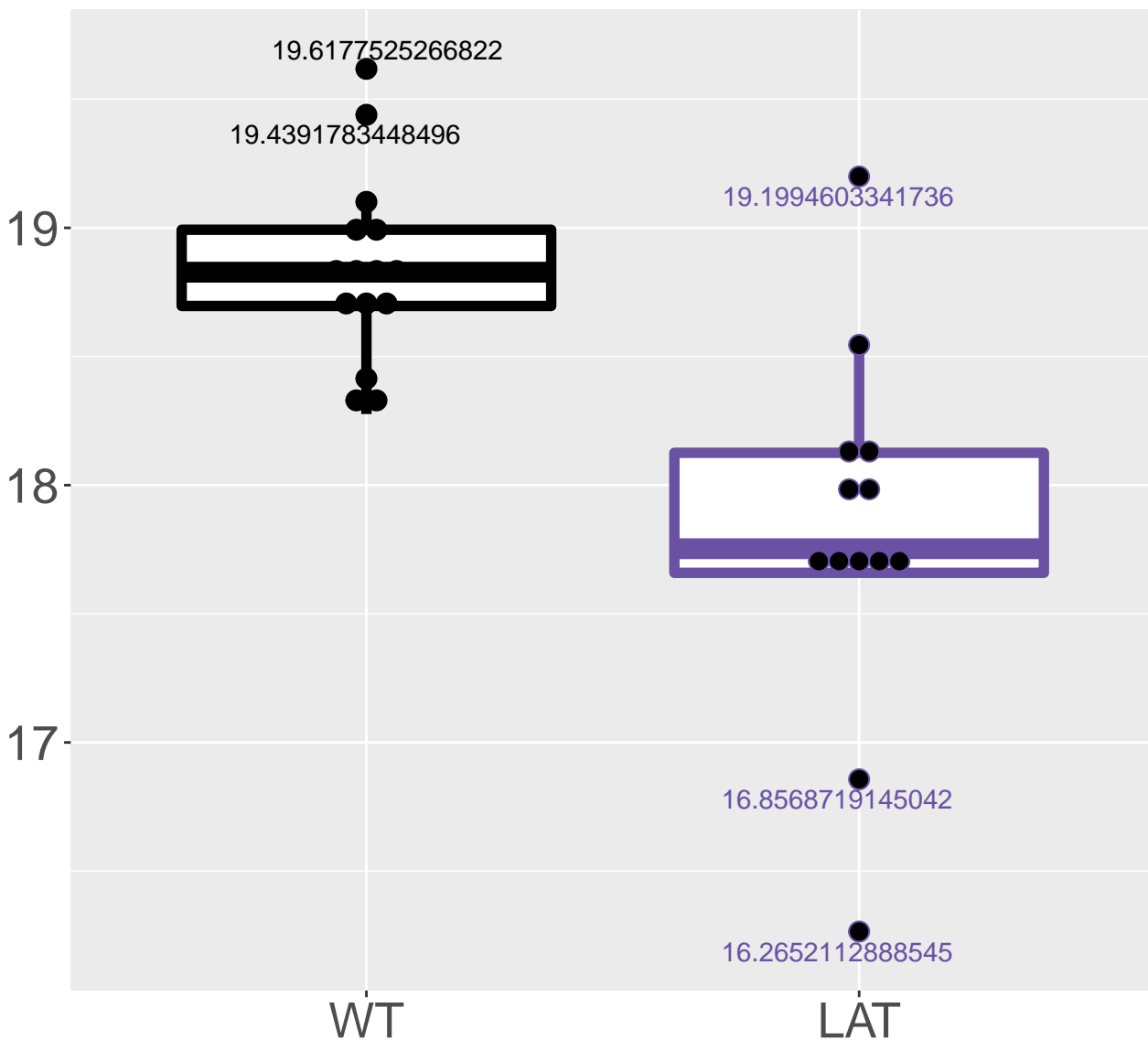
**M202.0723T562.84**

**FDR =  $6.3e-05$ , FC = 1.2**



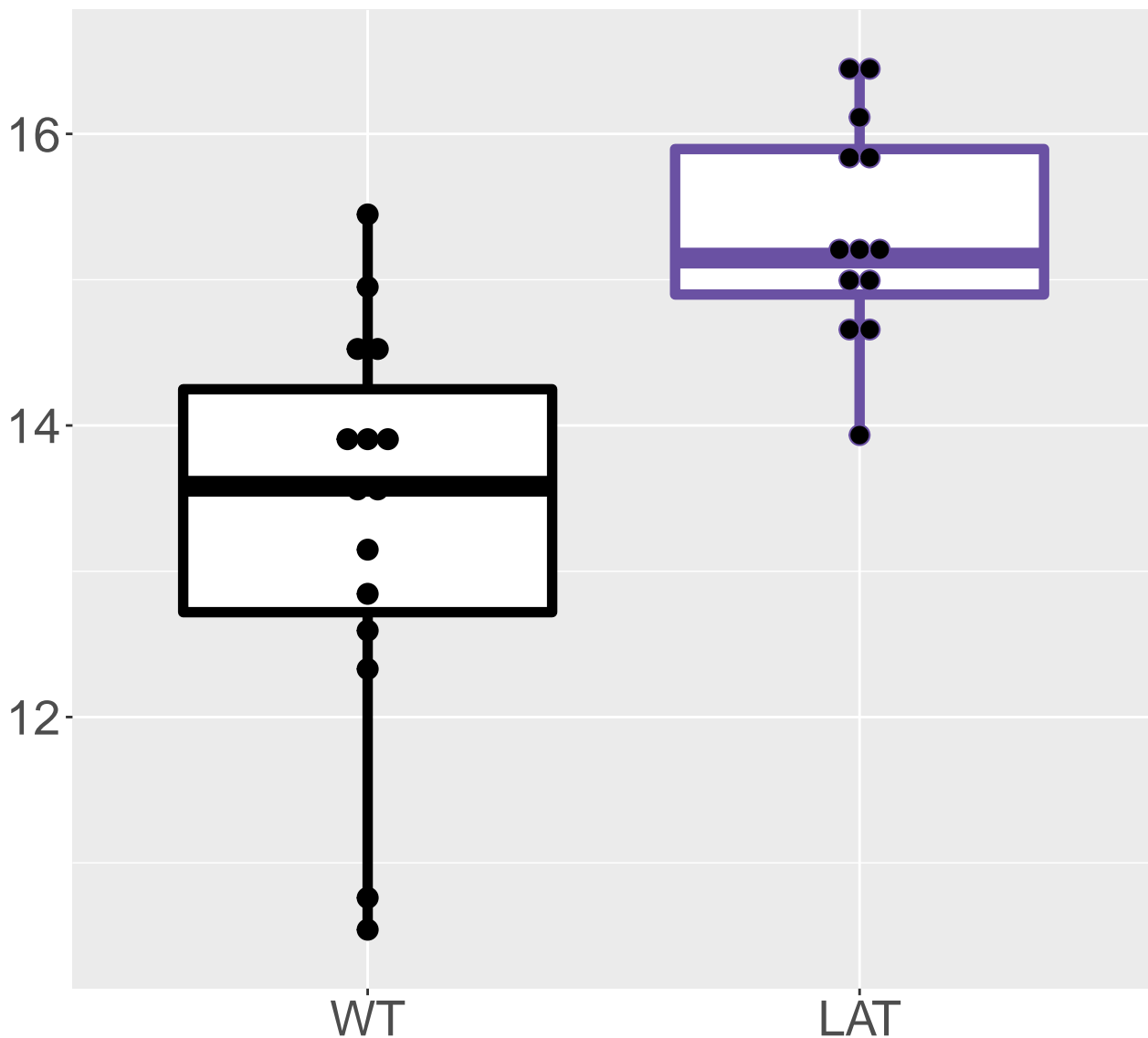


**FDR = 6.4e-05, FC = -1**



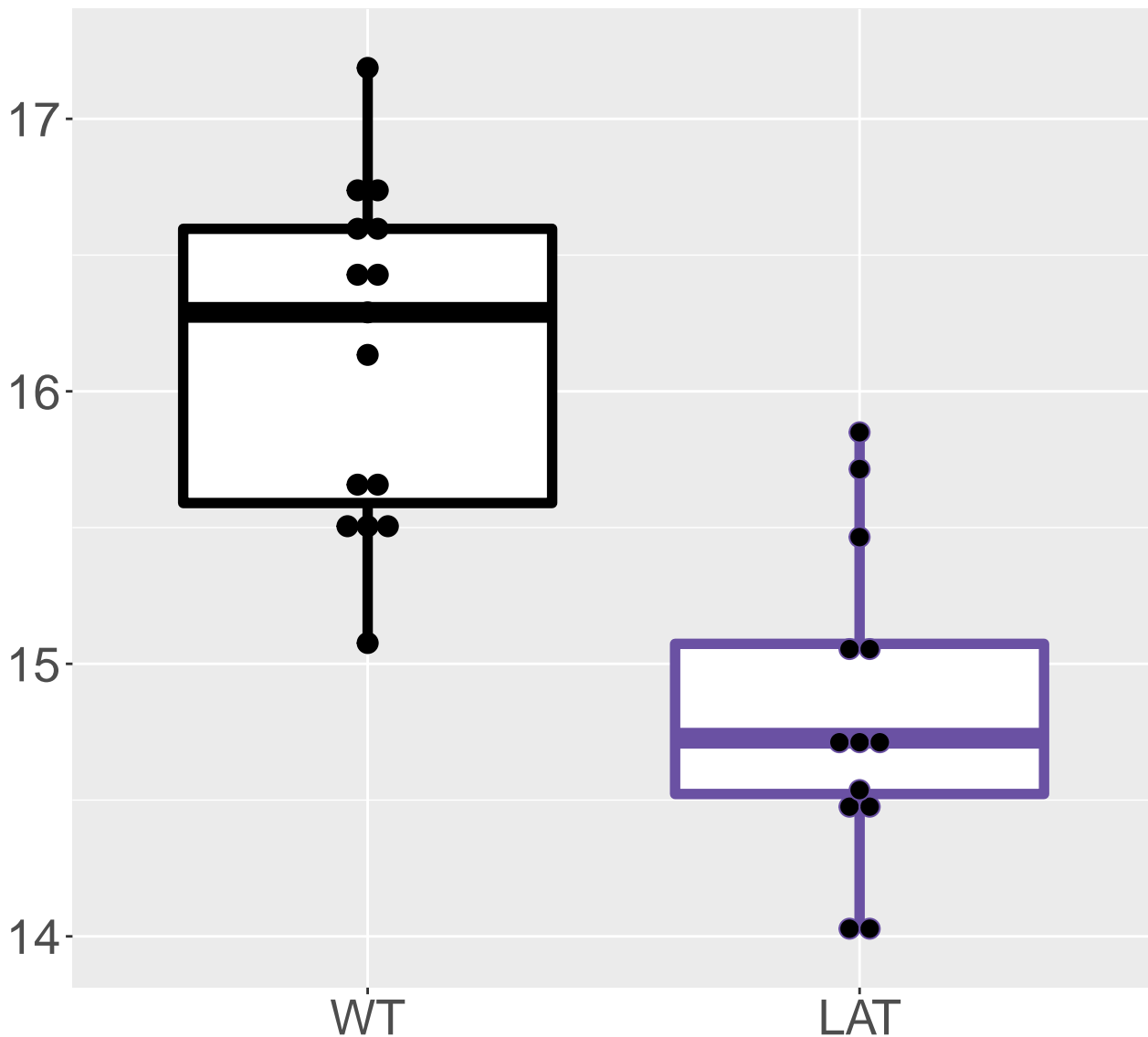
**M299.0656T187.13**

**FDR =  $6.5e-05$ , FC = 2, sex\*\***



**M970.2936T634.25**

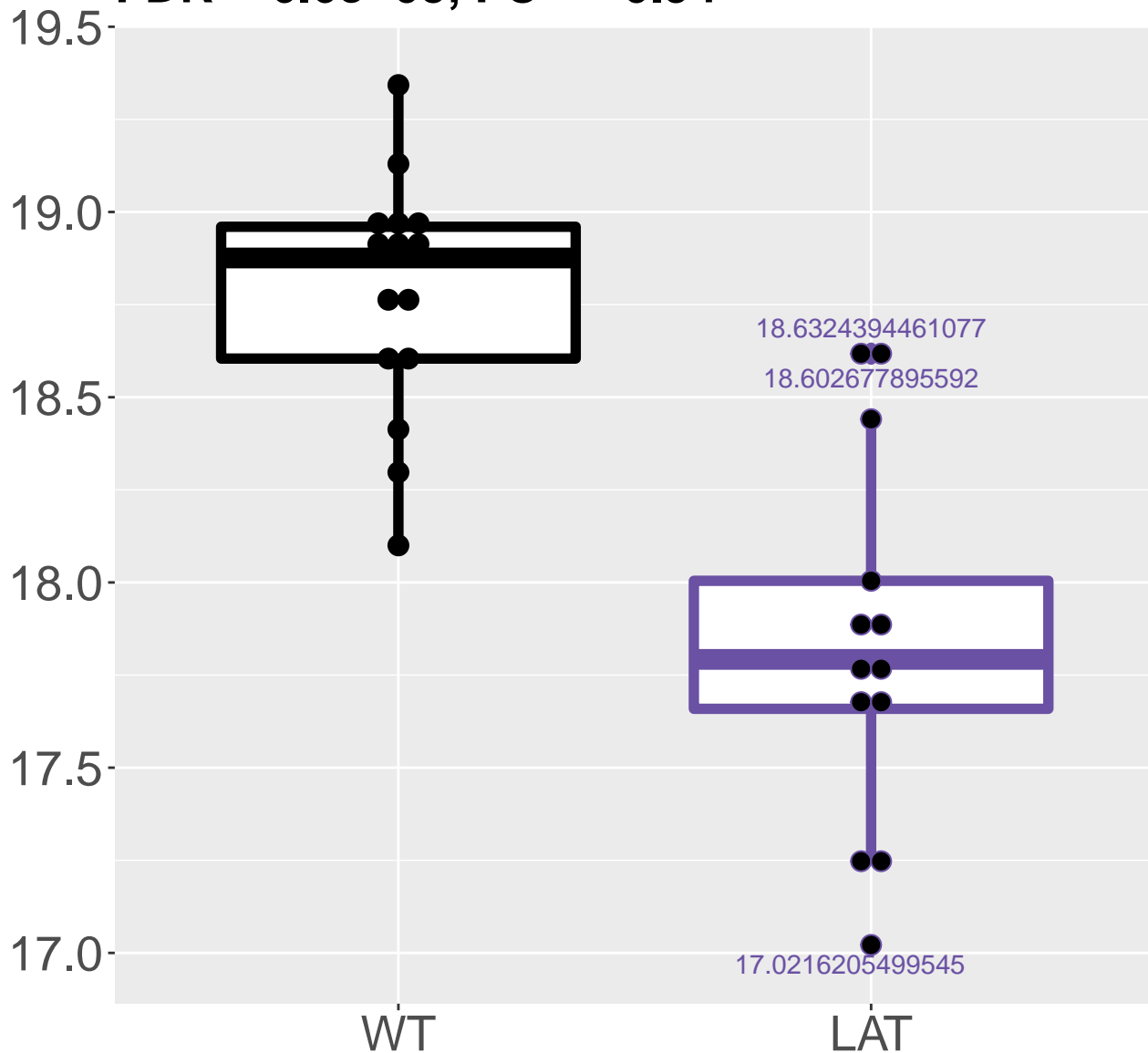
**FDR =  $6.5e-05$ , FC =  $-1.3$**





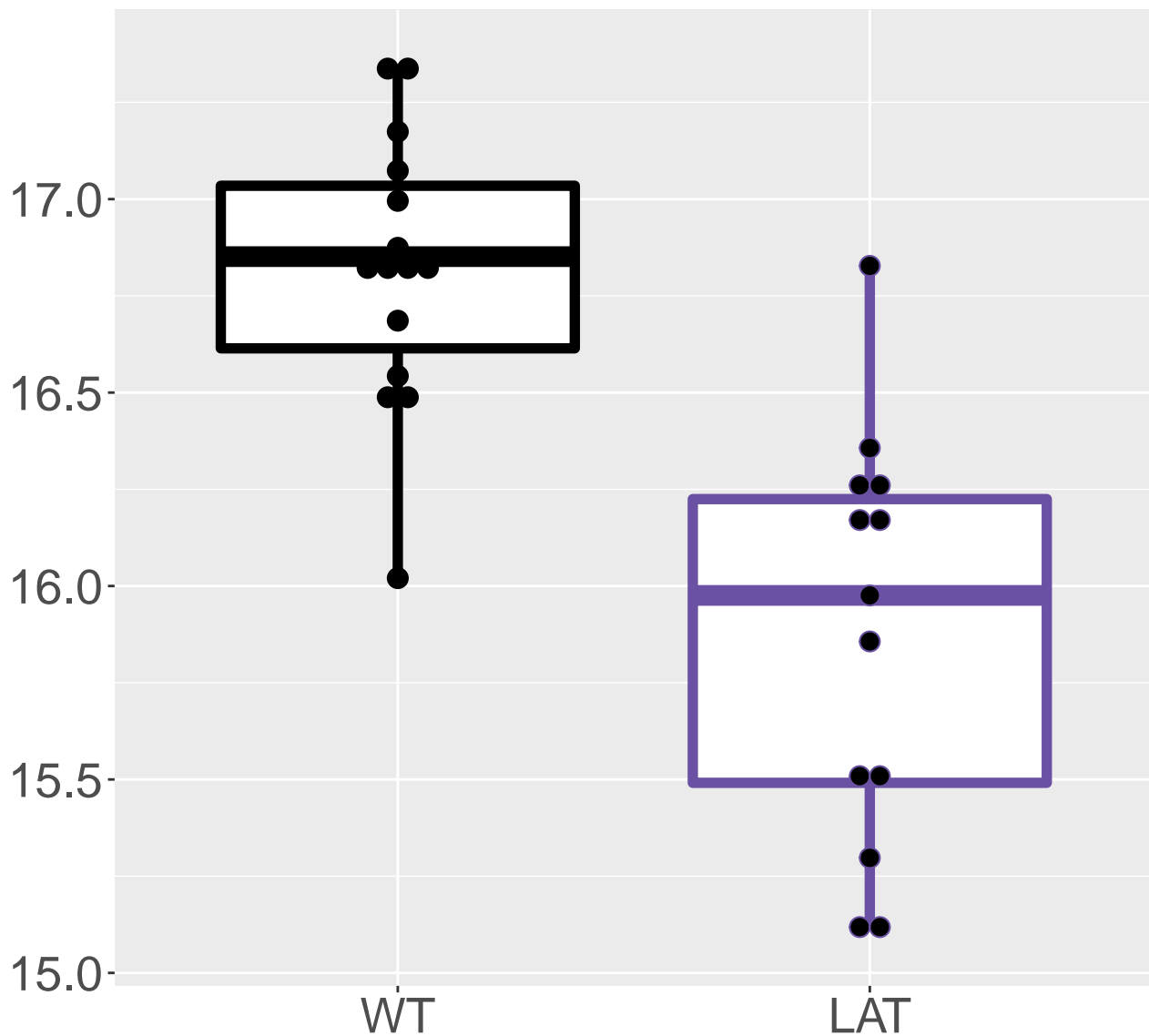
**M339.1211T254.7**

**FDR =  $6.6e-05$ , FC =  $-0.94$**



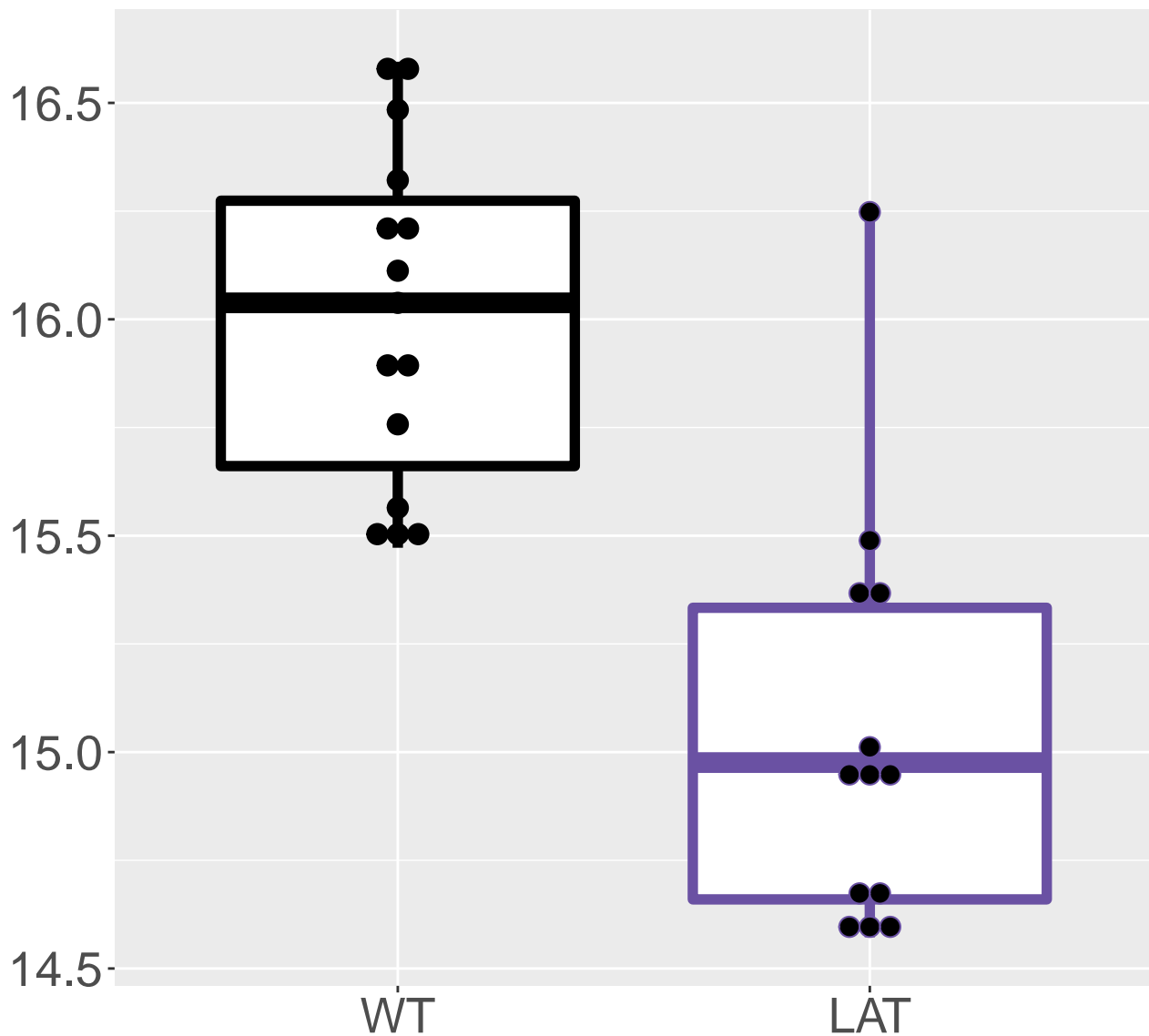
**M206.0672T440.71**

**FDR =  $6.7e-05$ , FC =  $-0.94$**



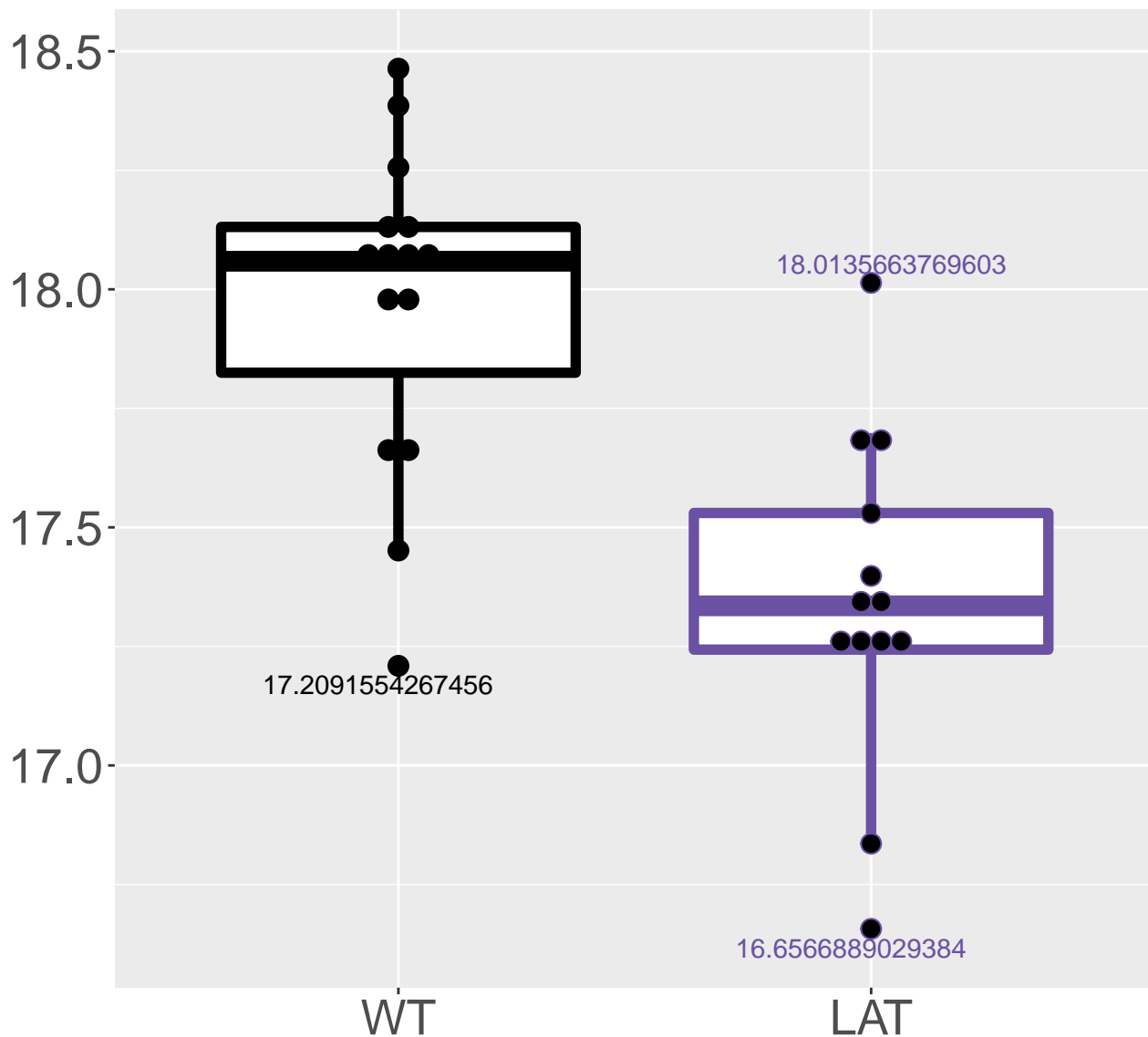
**M738.7407T667.97\_1**

**FDR =  $6.8e-05$ , FC =  $-0.97$**



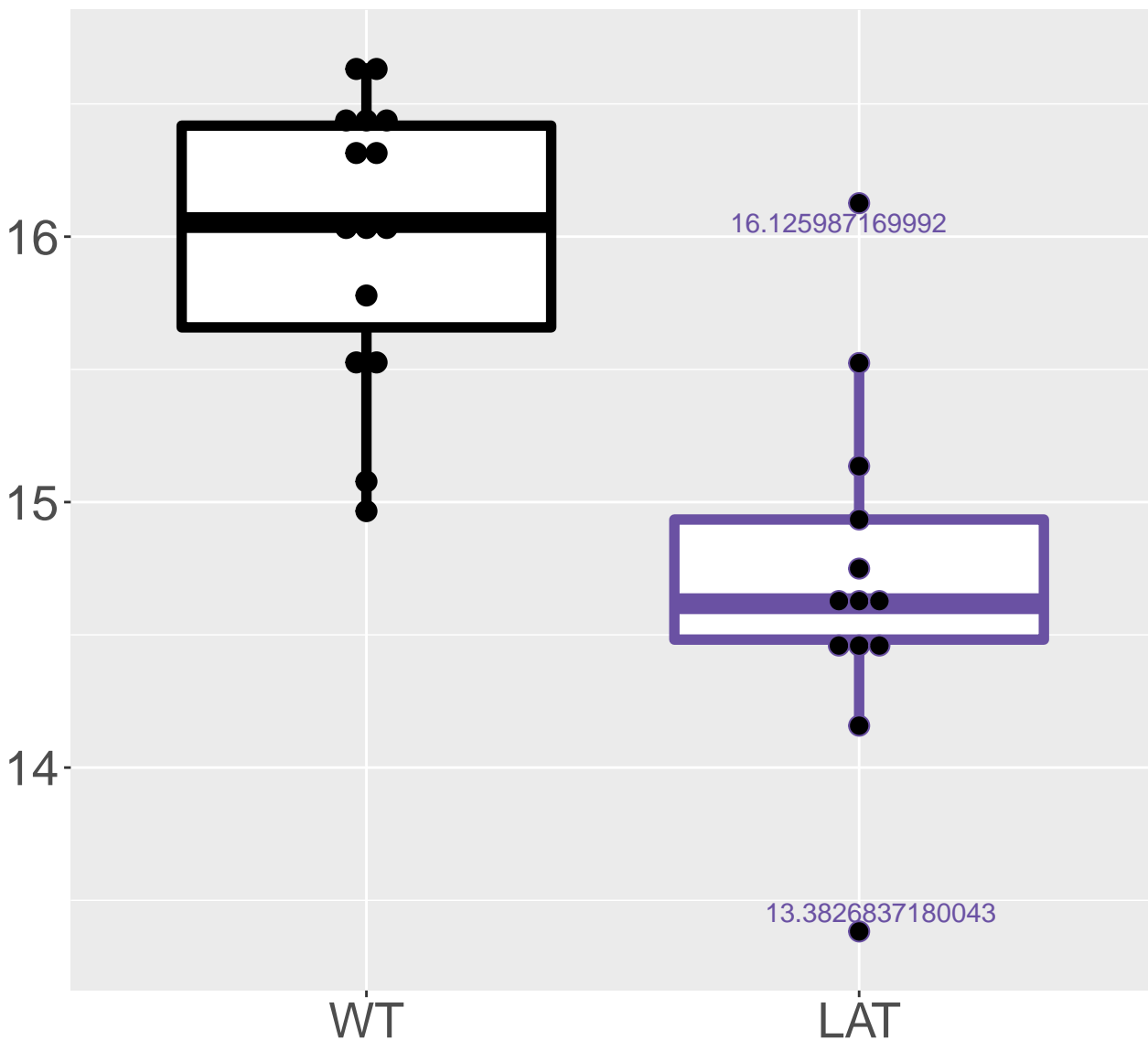
**M553.156T503.47**

**FDR =  $6.8e-05$ , FC =  $-0.63$ , sex\***



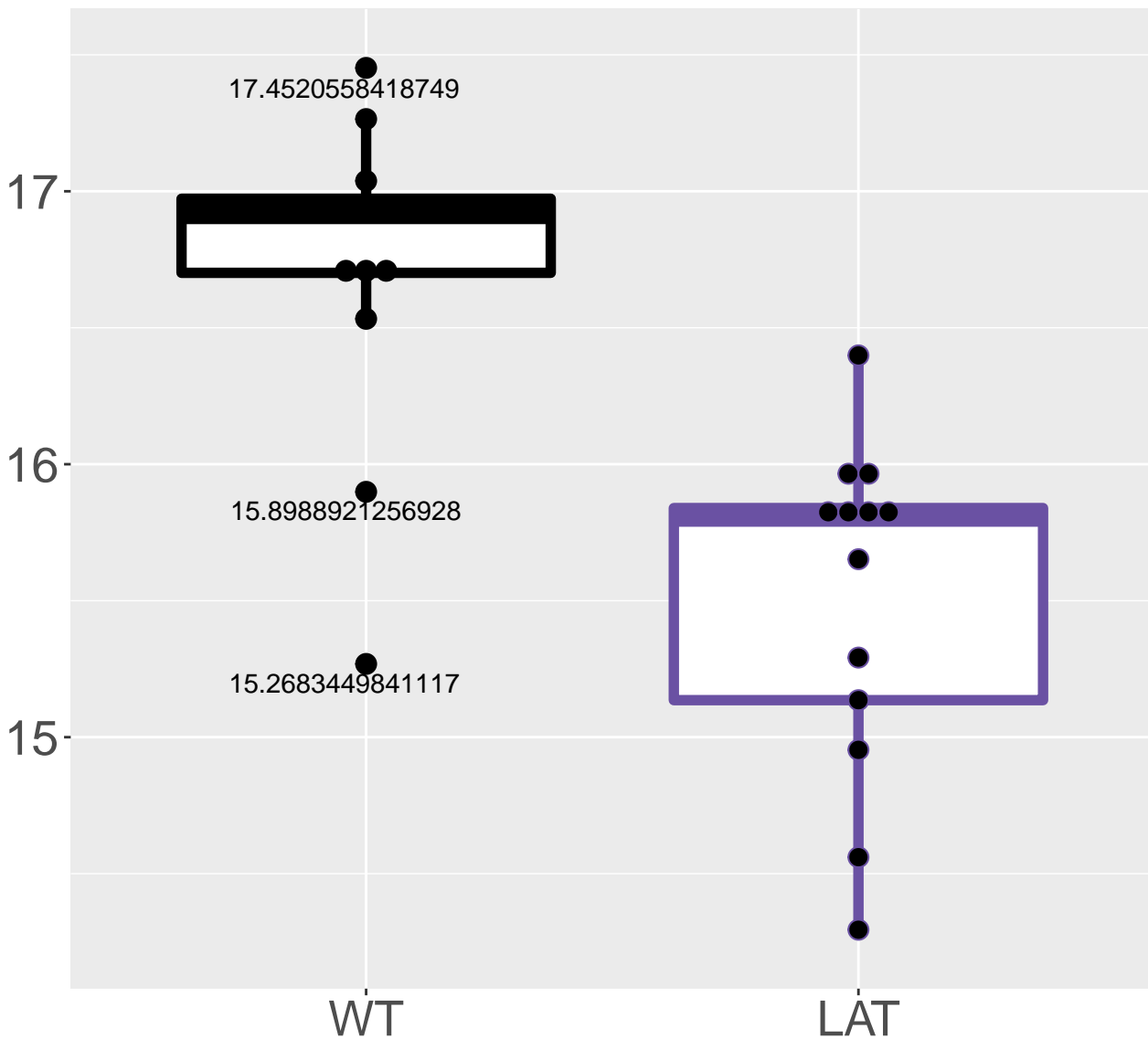


**FDR = 7.1e-05, FC = -1.3**



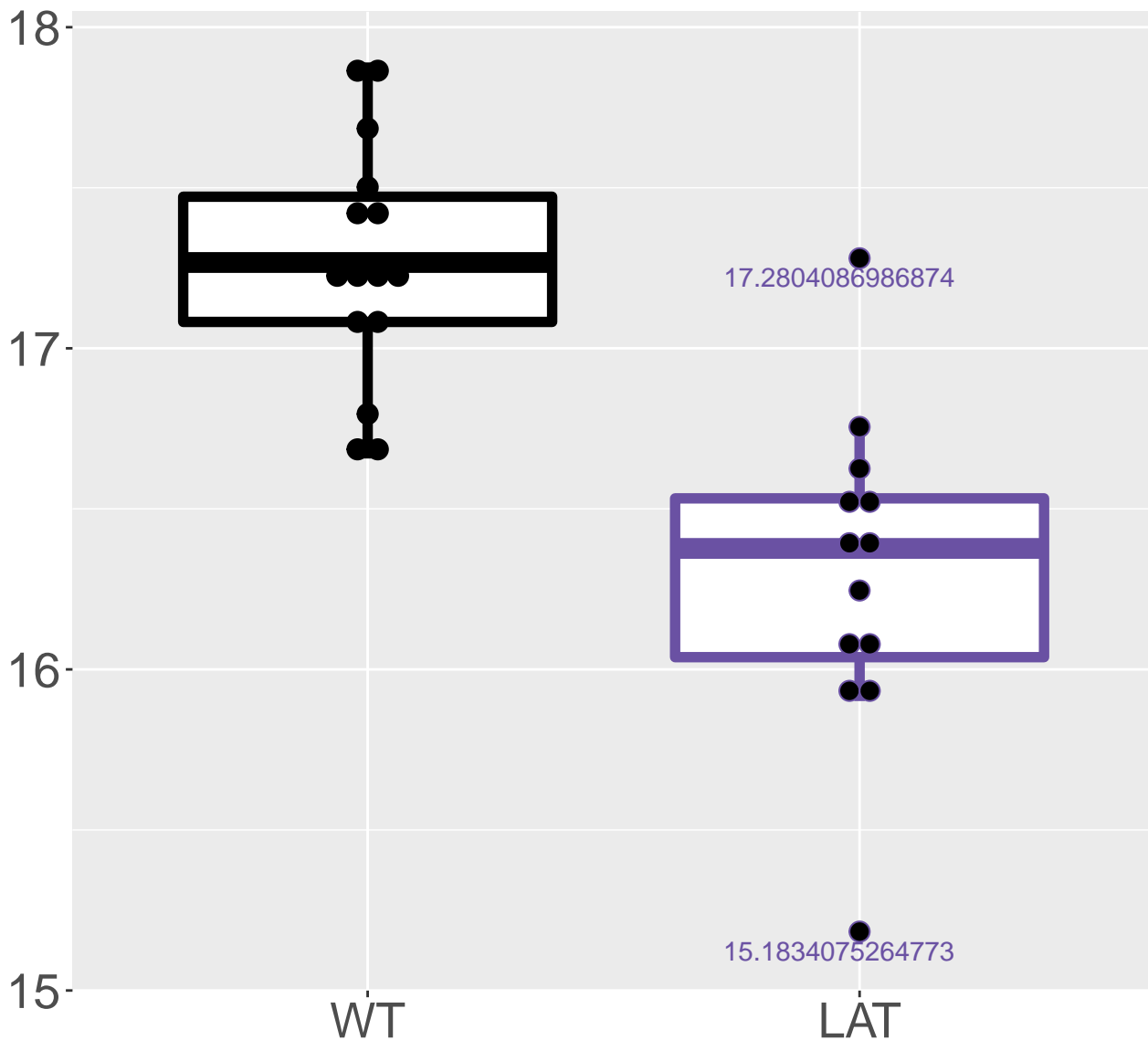
**M968.7908T574.28\_1**

**FDR = 7.1e-05, FC = -1.2**

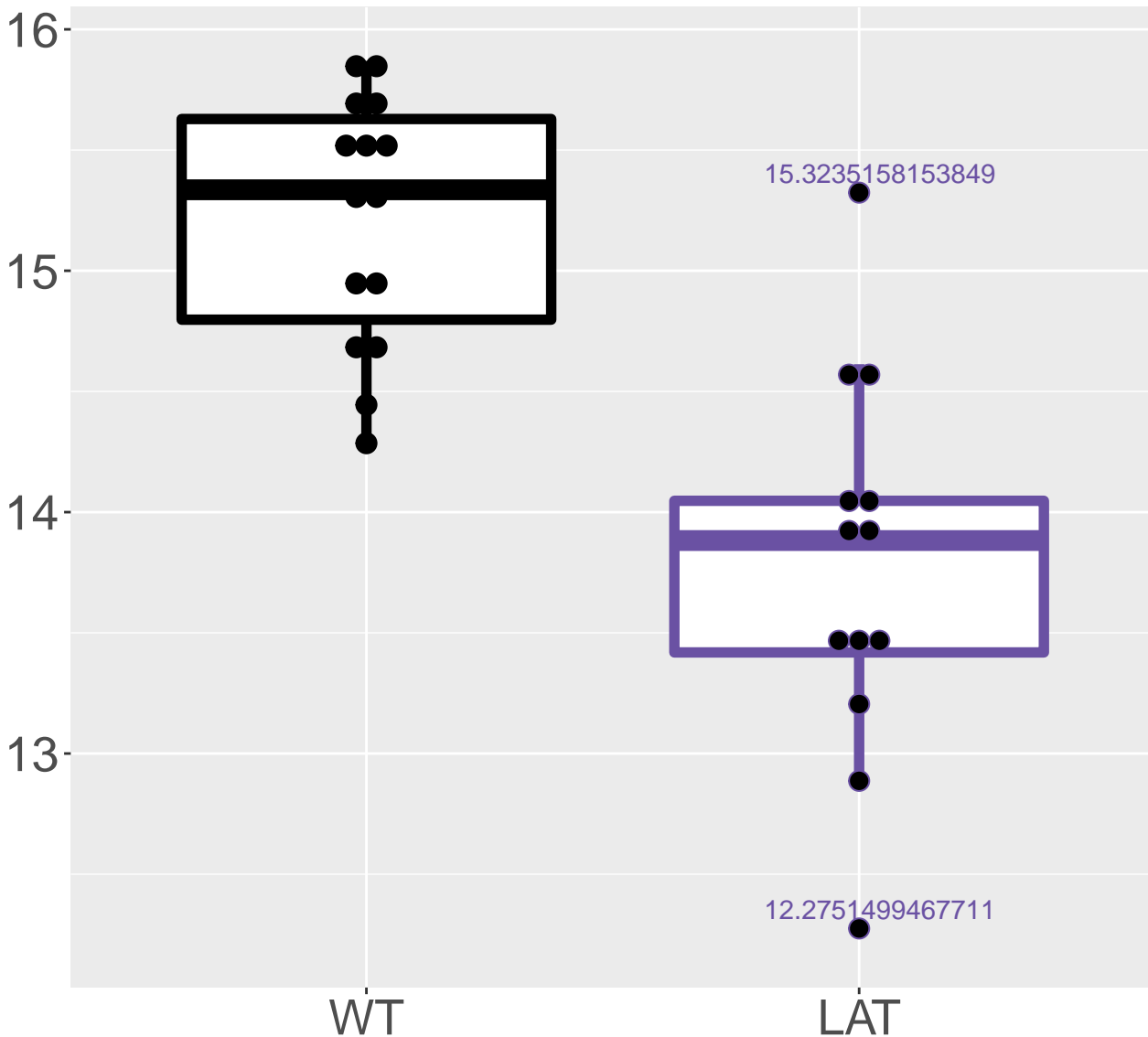


**M627.1929T509.72**

**FDR =  $7.2e-05$ , FC =  $-0.97$**

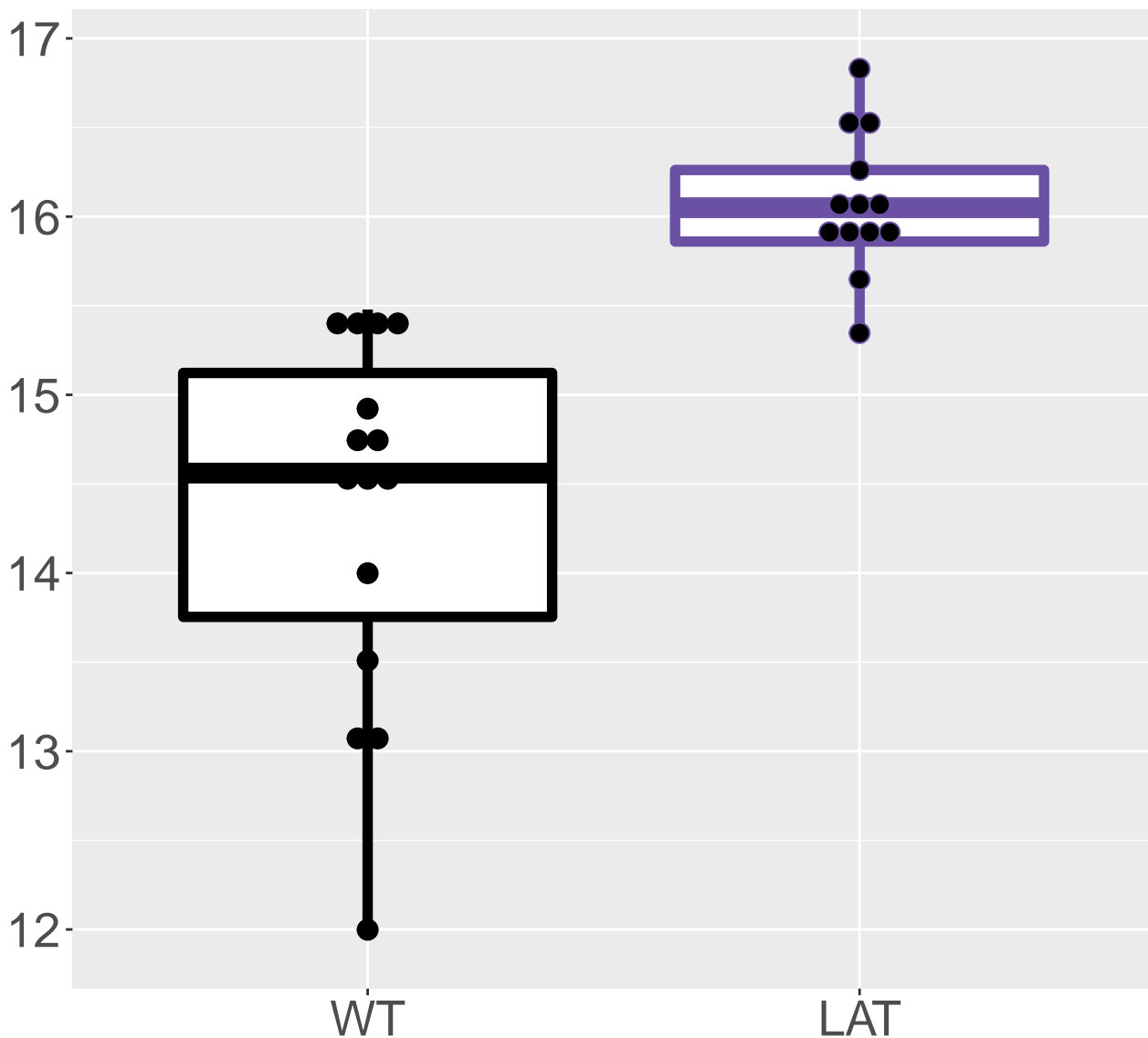


**M963.2869T621.29\_2**  
**FDR =  $7.2e-05$ , FC =  $-1.4$**



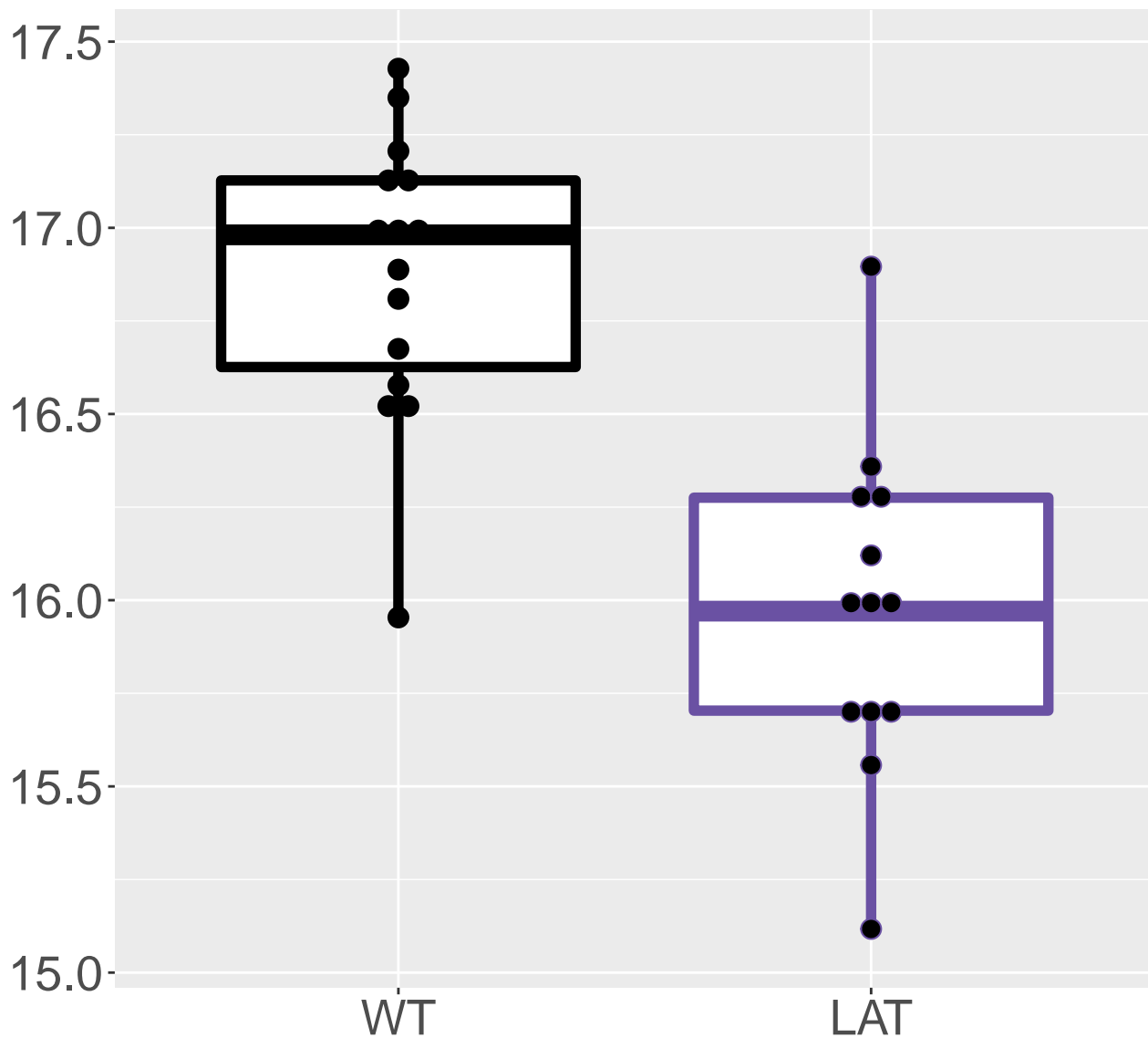
**M570.145T539.42**

**FDR =  $7.3e-05$ , FC = 1.7**



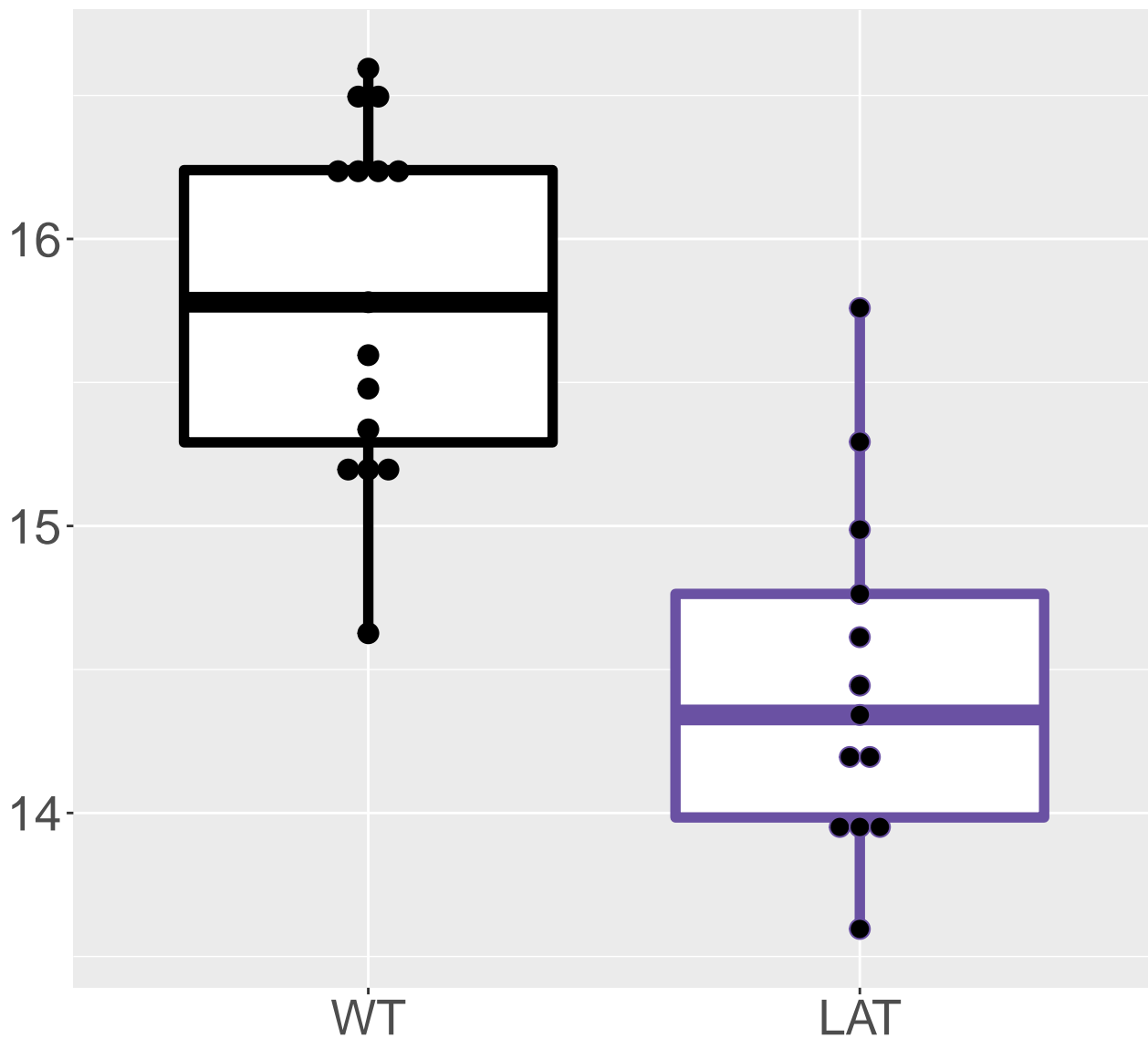
**M485.152T578.2**

**FDR =  $7.3e-05$ , FC =  $-0.9$**



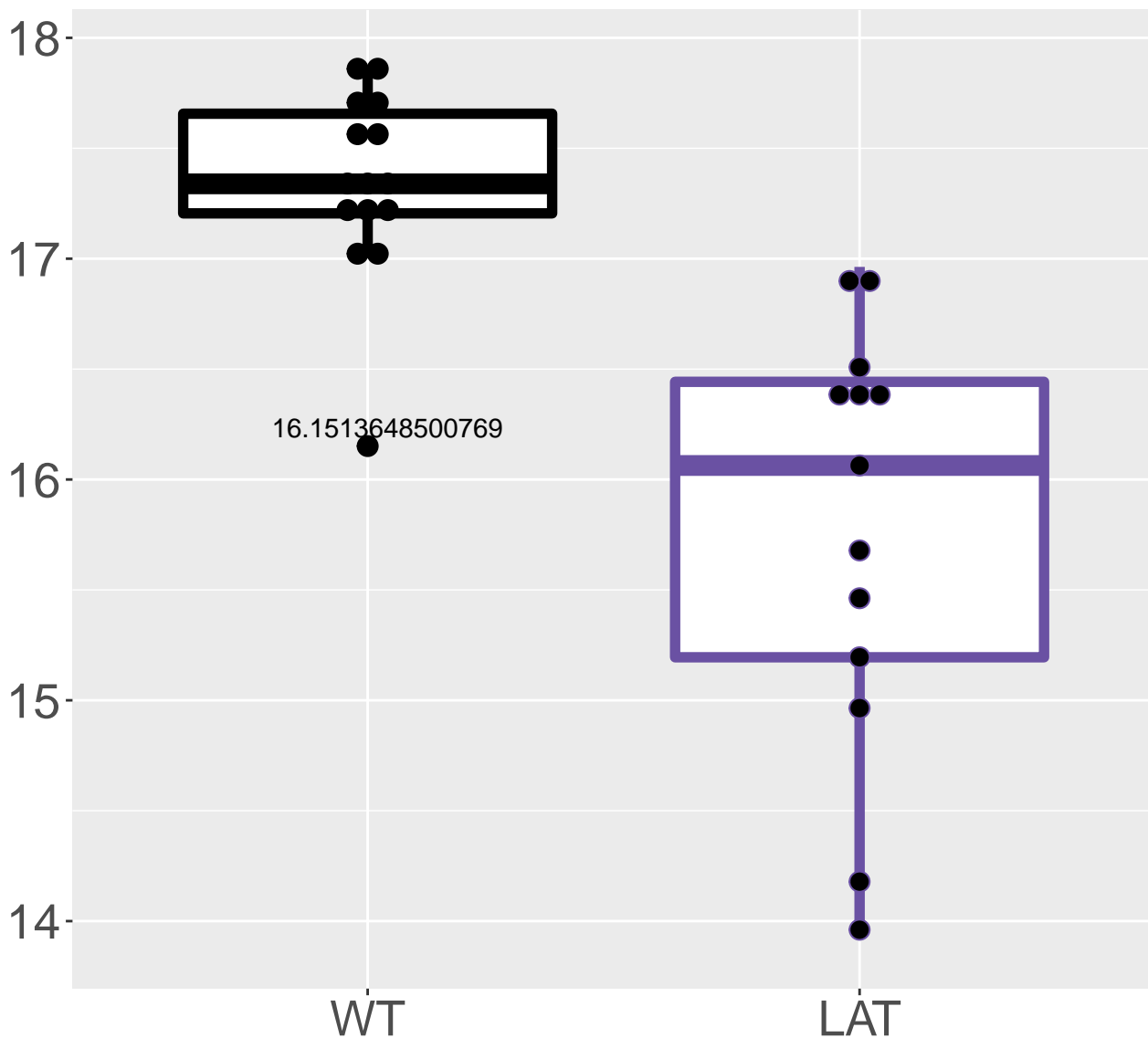
**M909.2974T634.71**

**FDR =  $7.3e-05$ , FC =  $-1.3$**



**M545.2355T206.16**

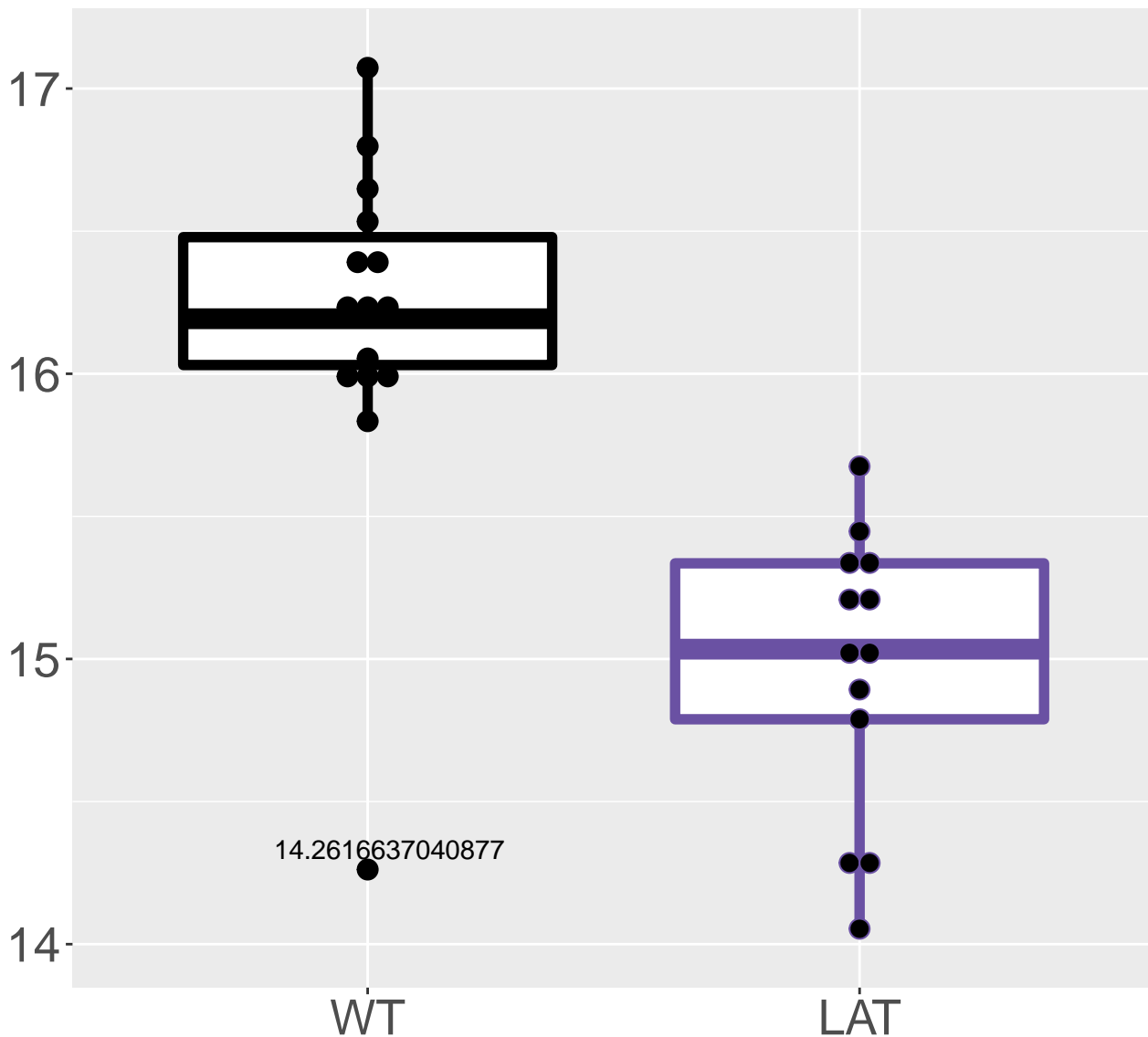
**FDR =  $7.5e-05$ , FC =  $-1.6$**





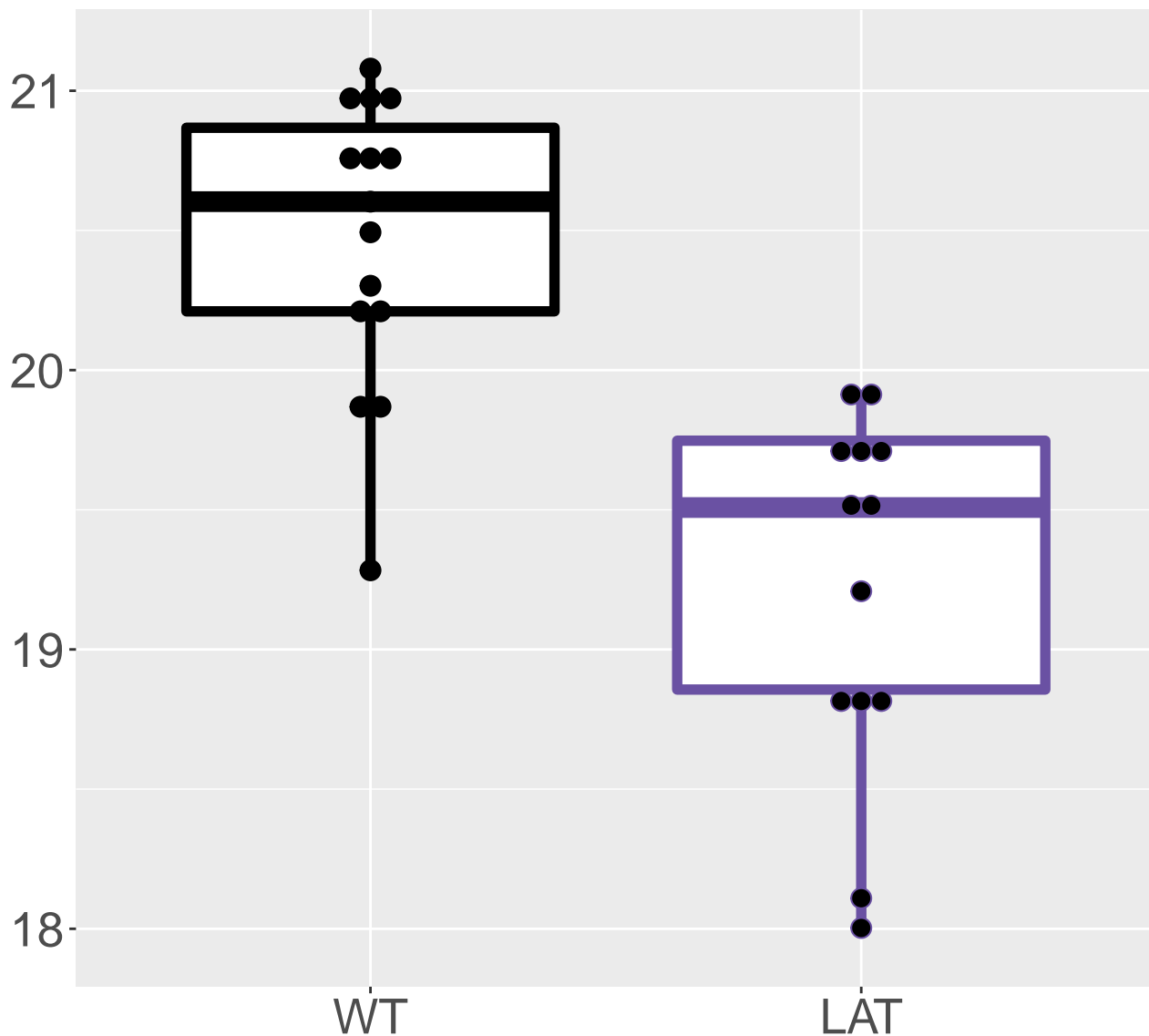
**M106.0396T480.79**

**FDR =  $7.6e-05$ , FC =  $-1.2$**



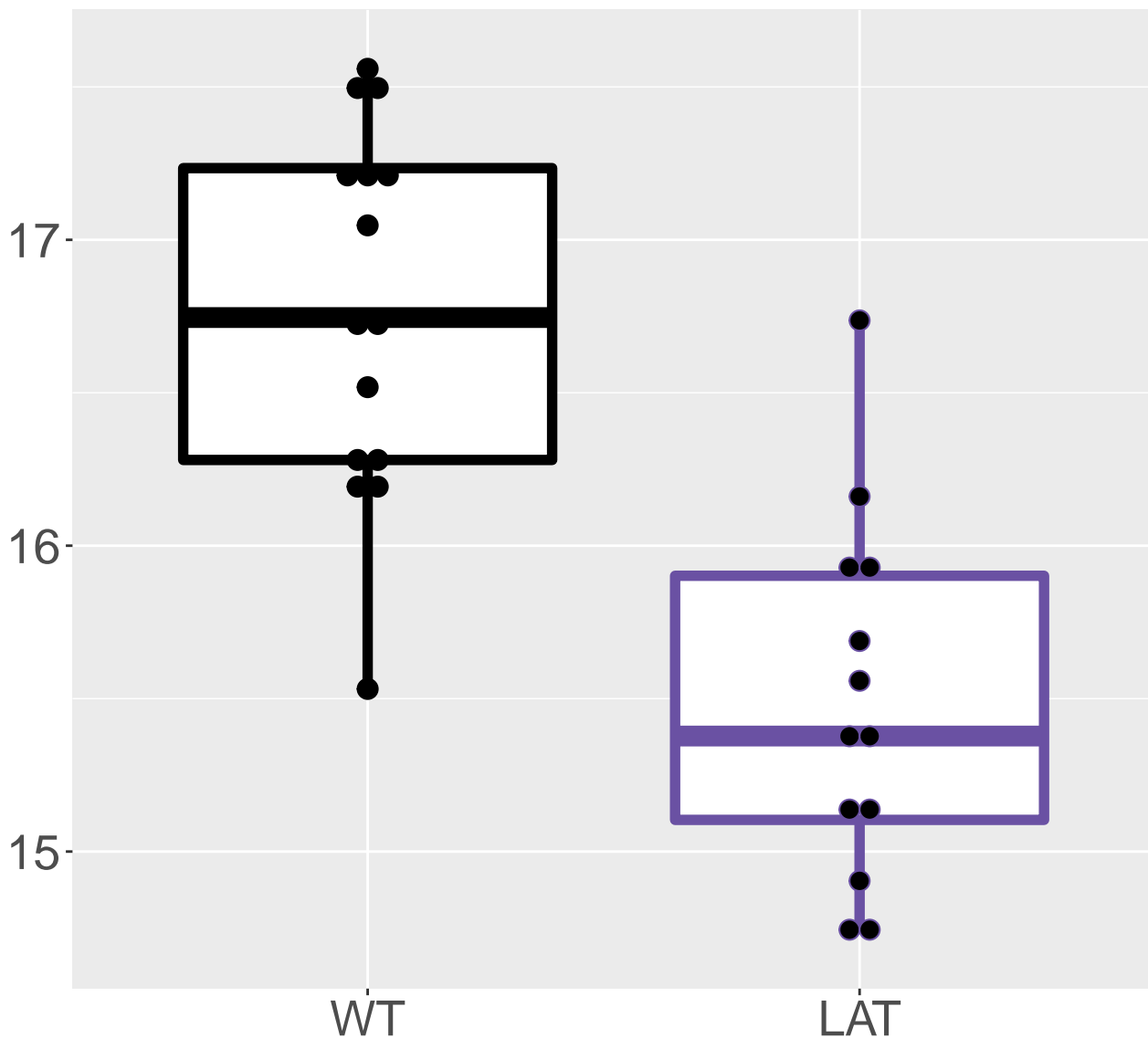
**M148.5313T539.5**

**FDR =  $7.7e-05$ , FC =  $-1.3$**

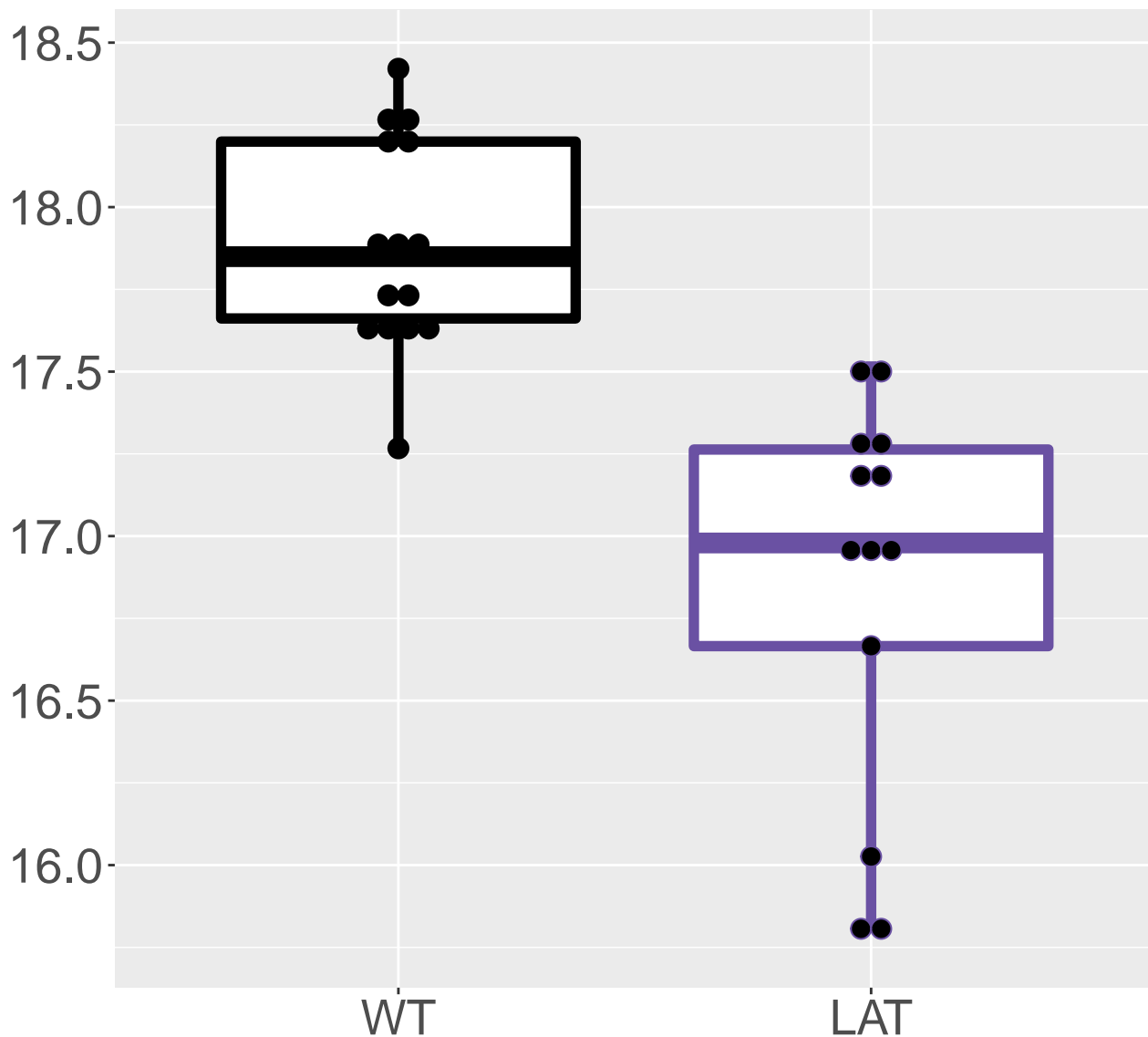


**M908.7958T634.43**

**FDR =  $7.7e-05$ , FC =  $-1.3$**

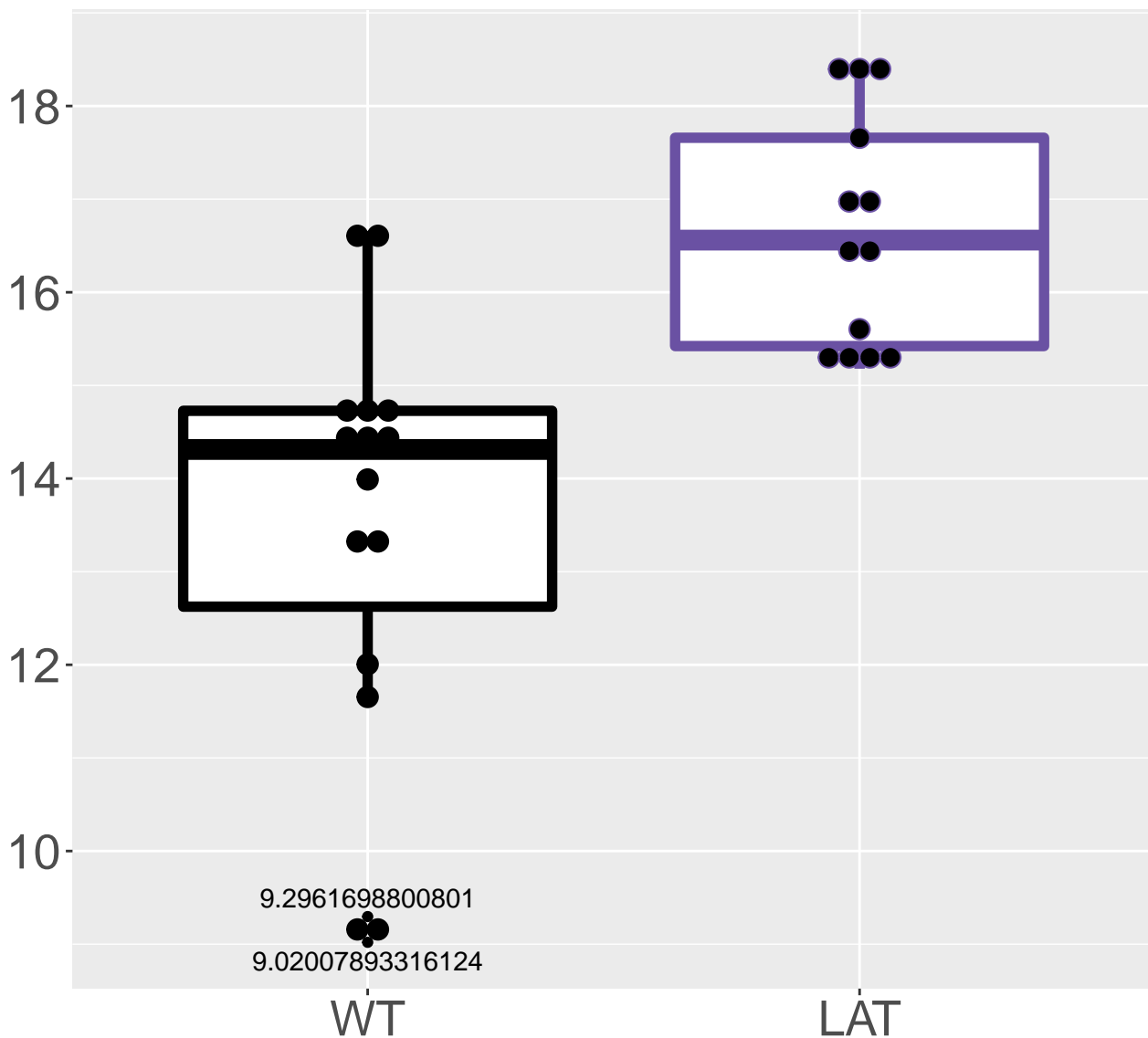


**M521.1325T361.61**  
**FDR =  $7.8e-05$ , FC = -1**



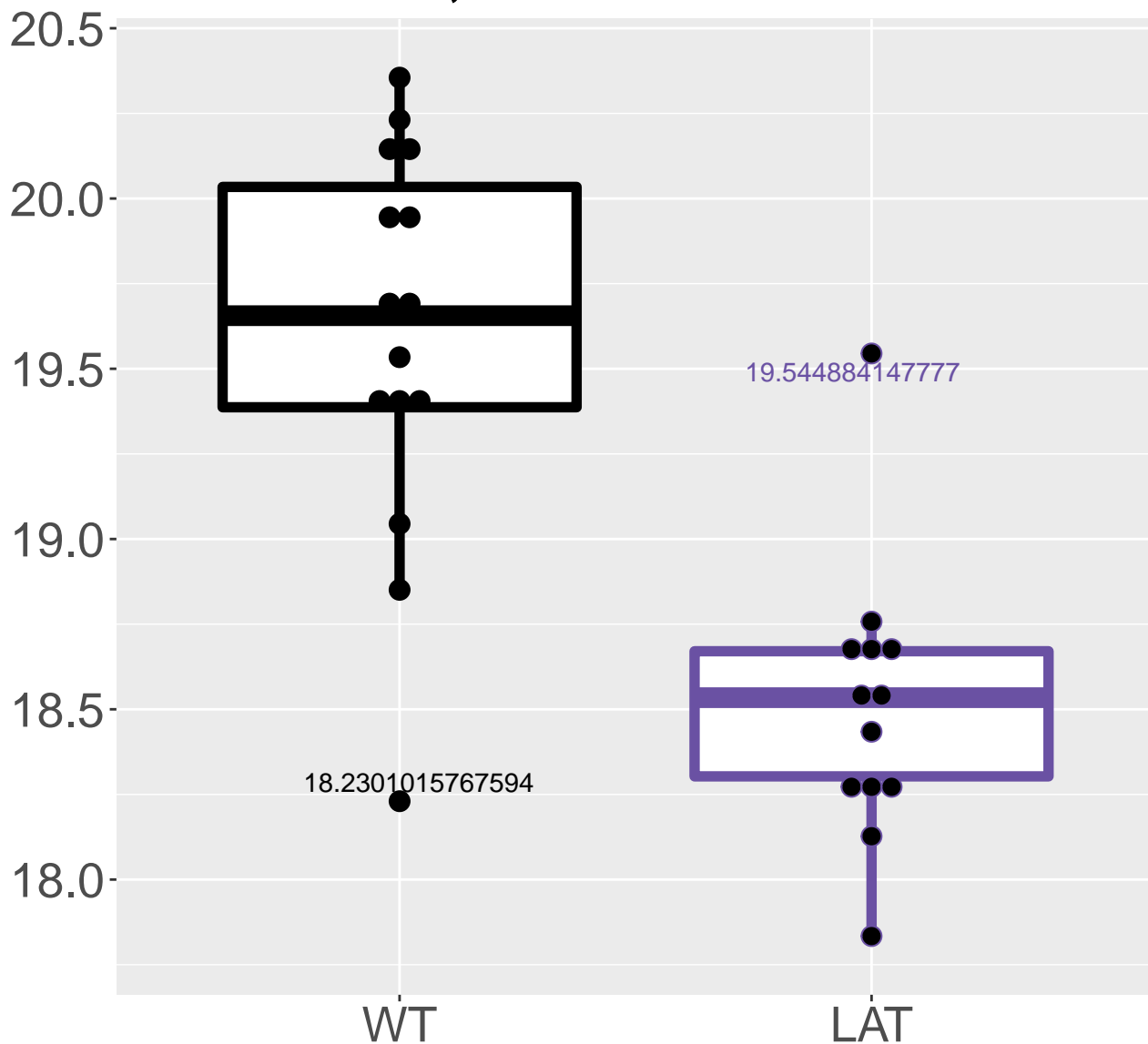
**M183.9961T608.69**

**FDR = 8.1e-05, FC = 3.1, sex\*\***



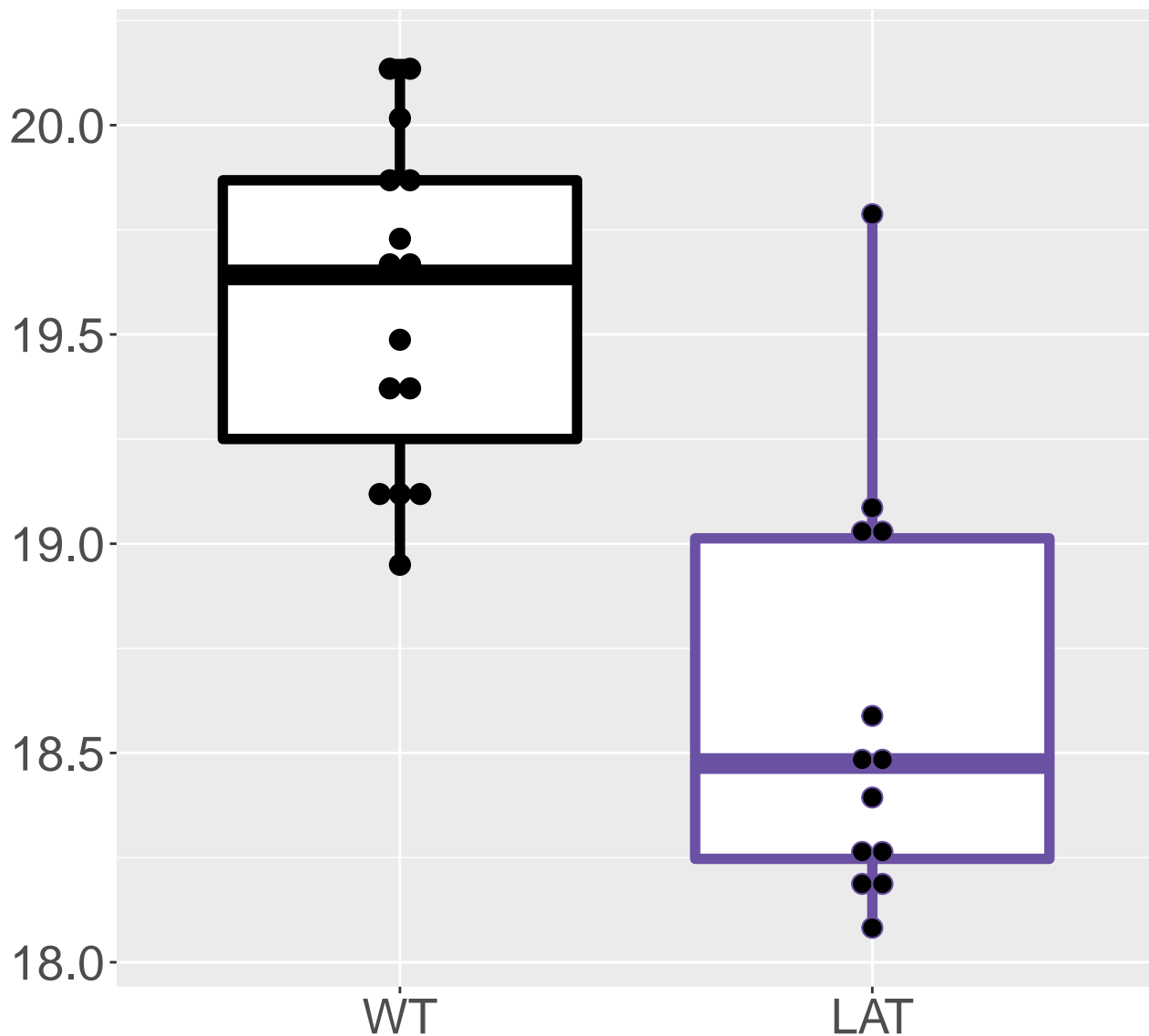
**M361.1411T327.62**

**FDR =  $8.1\text{e-}05$ , FC =  $-1.1$**

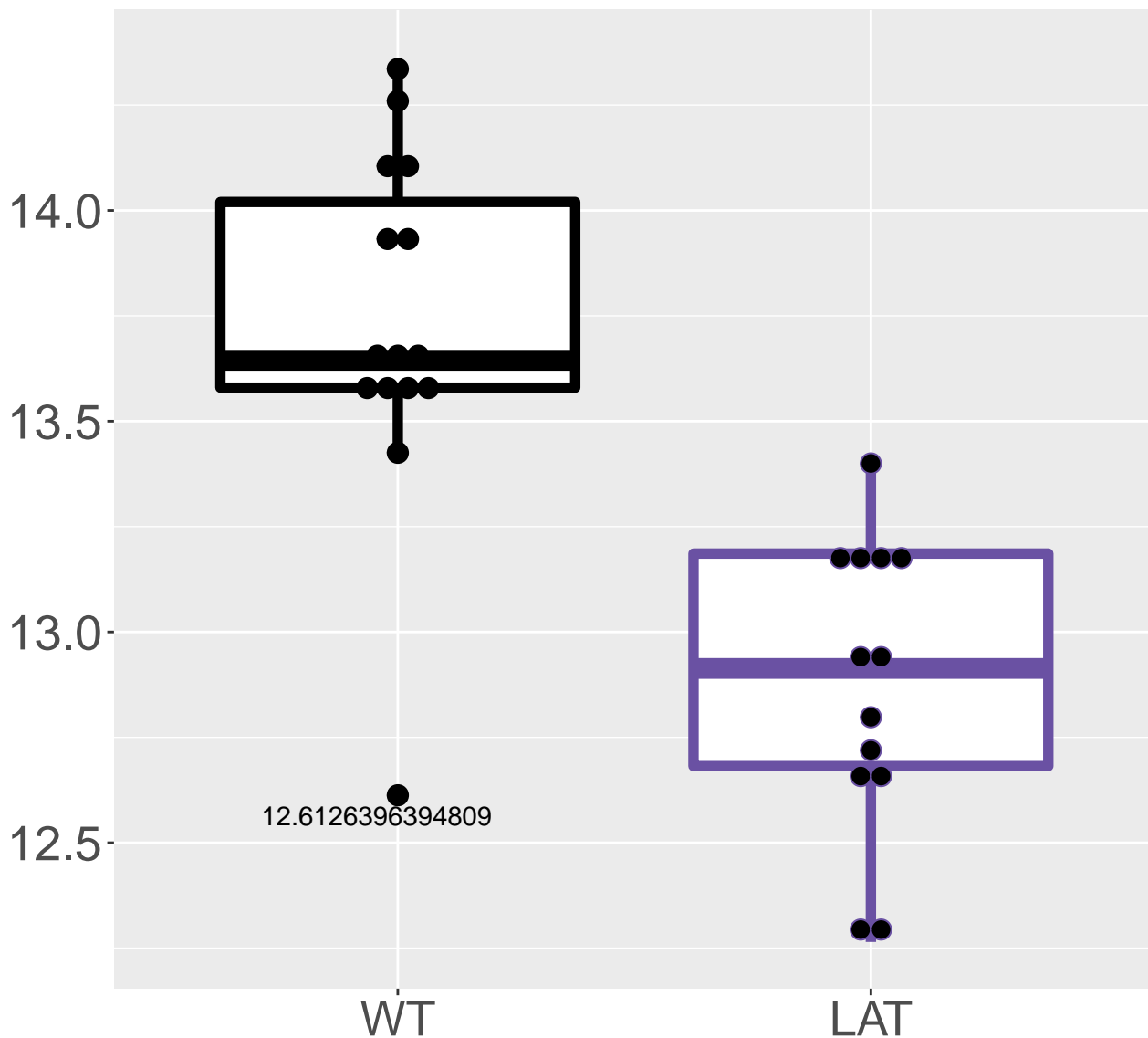


**M737.2364T667.84**

**FDR =  $8.1\text{e-}05$ , FC =  $-0.97$**



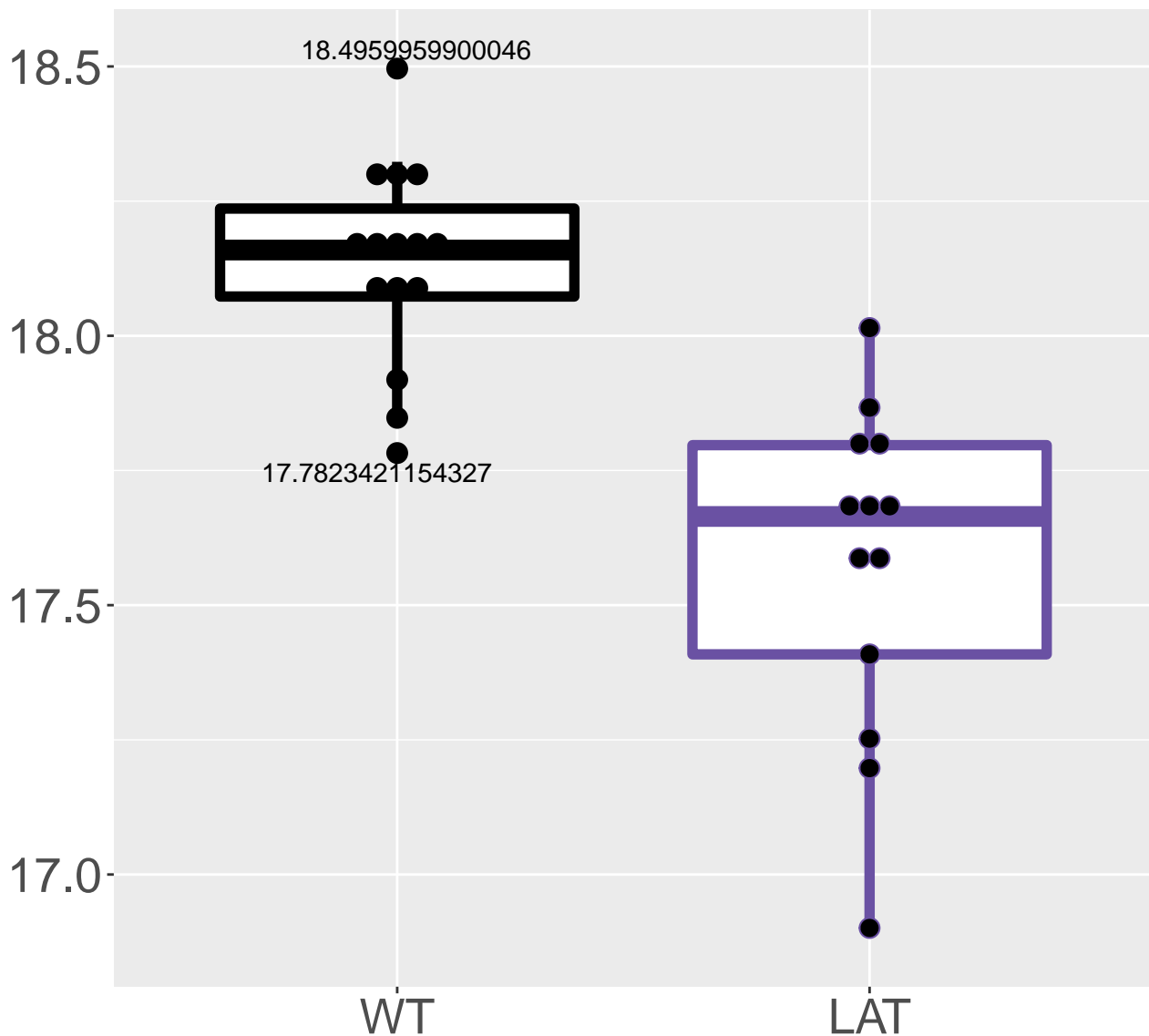
**FDR = 8.1e-05, FC = -0.85**





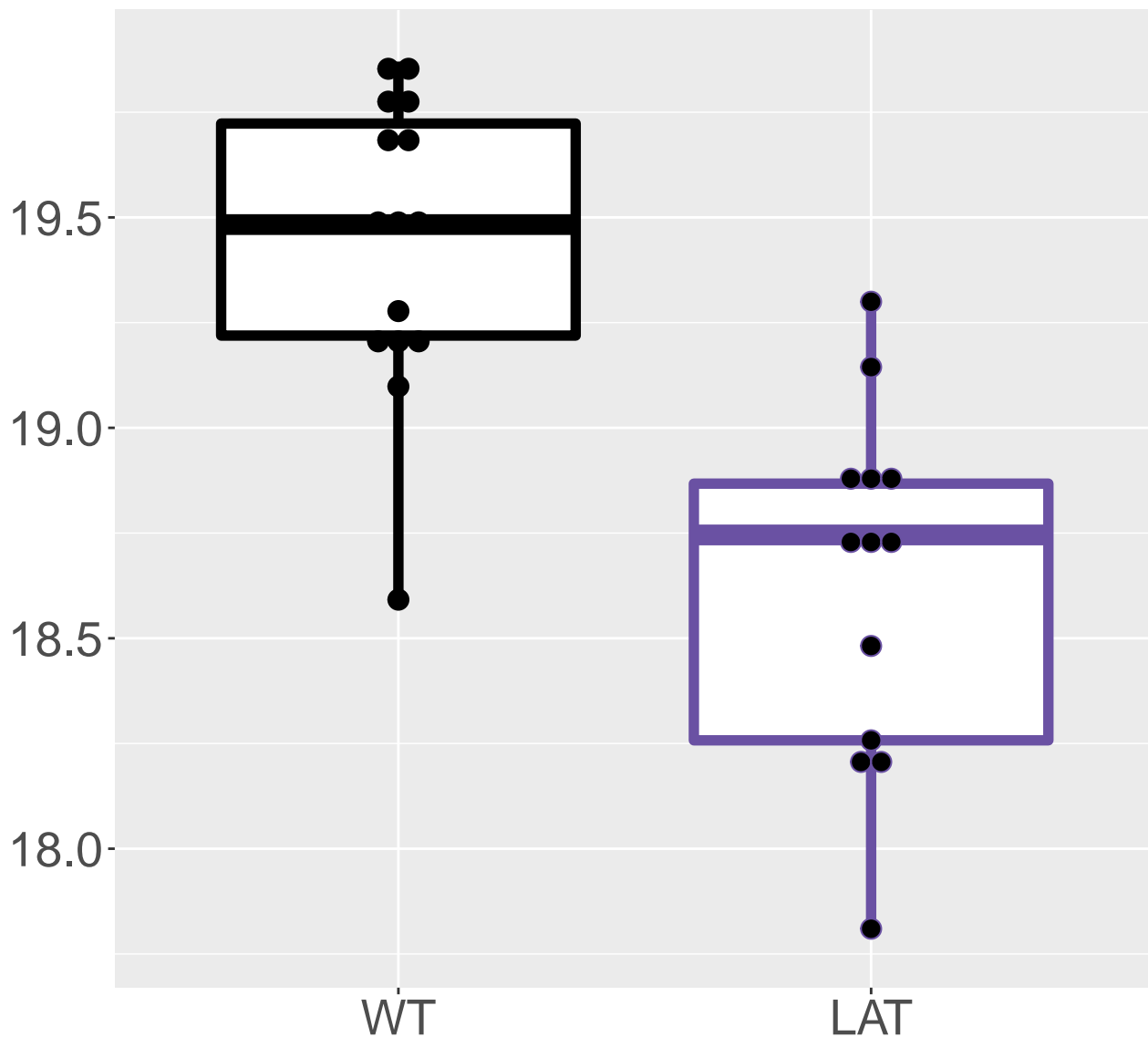
**M332.1005T335.21**

**FDR =  $8.1\text{e-}05$ , FC =  $-0.56$**



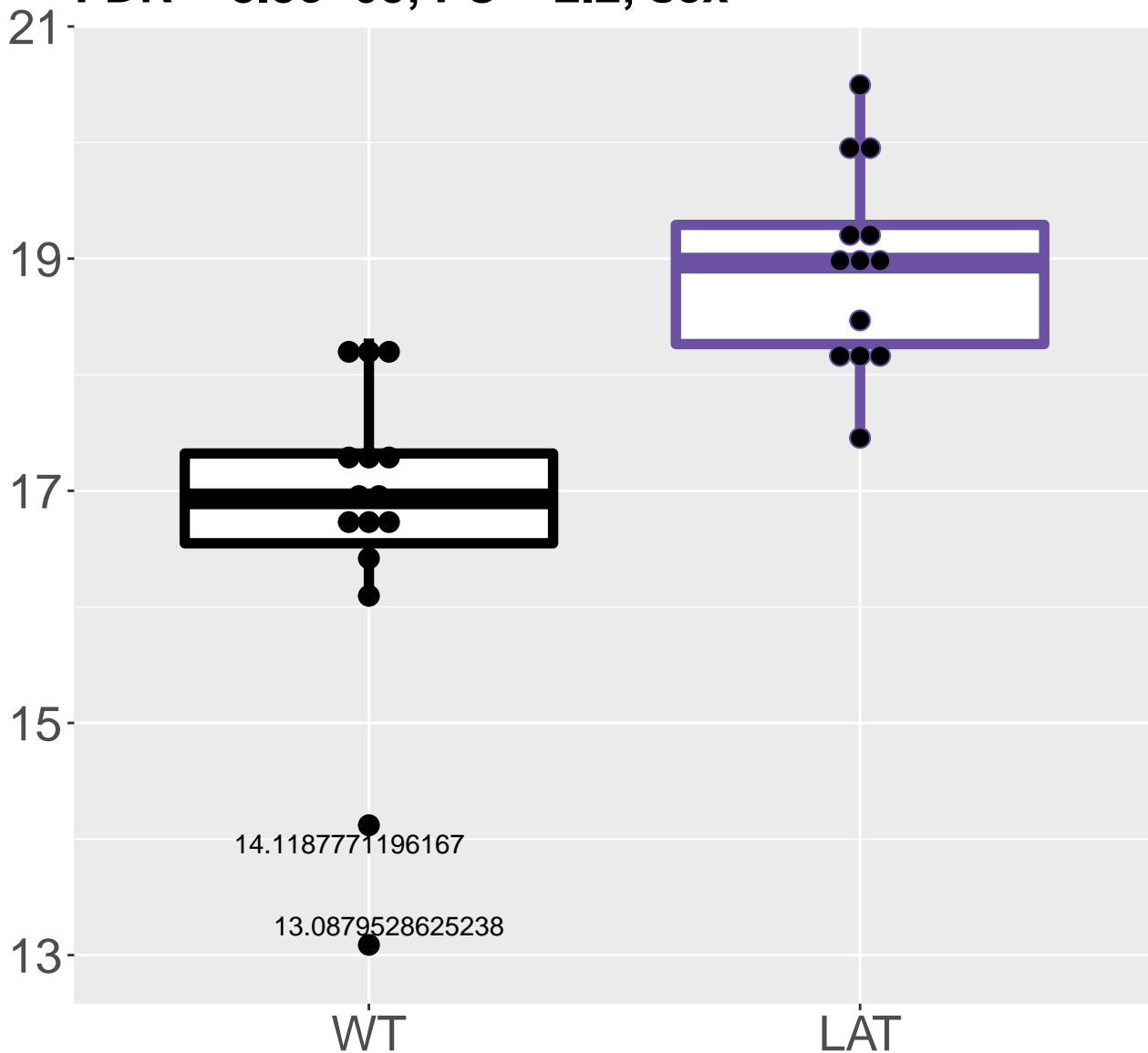
**M337.0782T509.03**

**FDR =  $8.2e-05$ , FC =  $-0.81$**



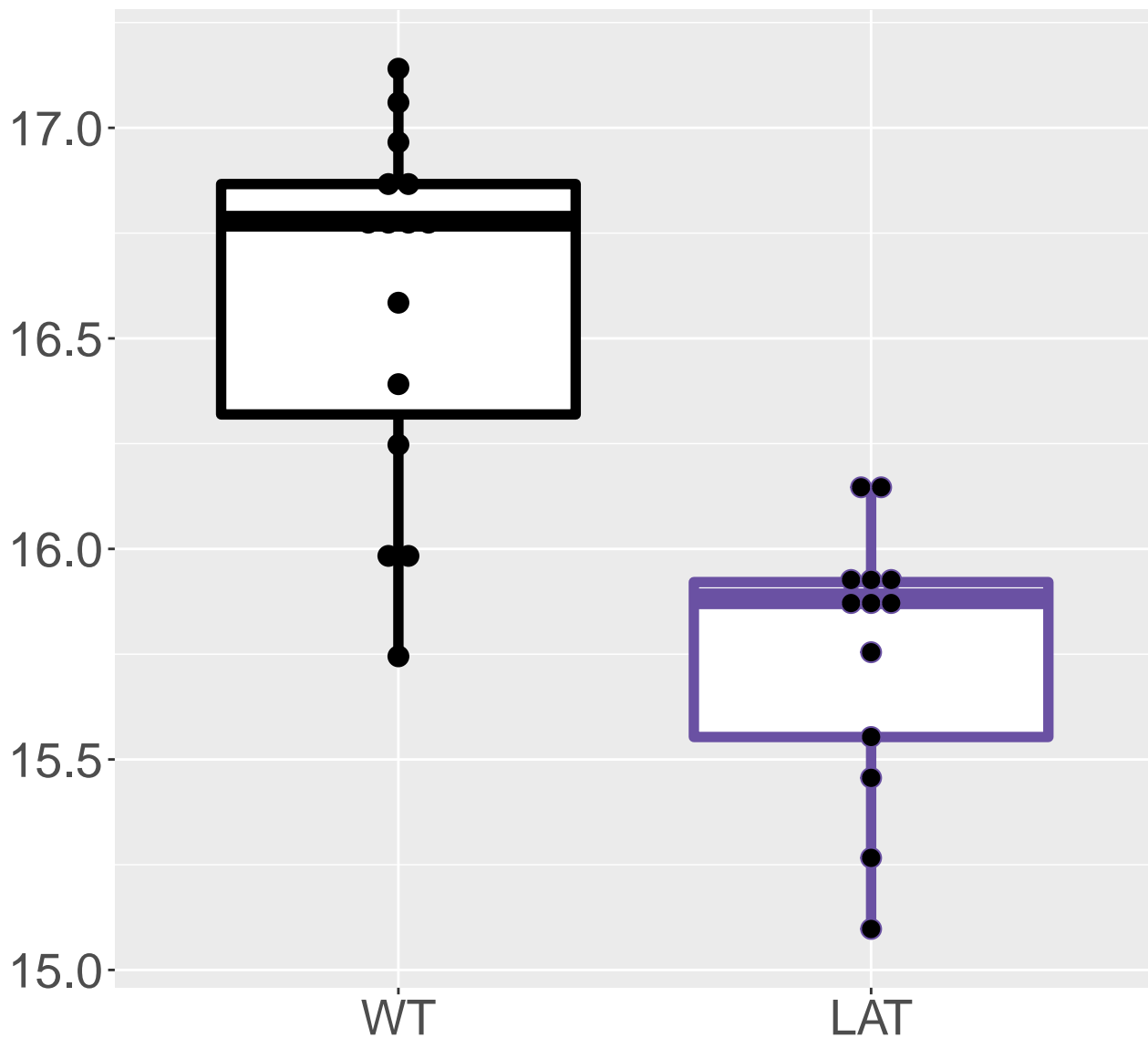
**M199.0014T458.99**

**FDR =  $8.3e-05$ , FC = 2.2, sex\***



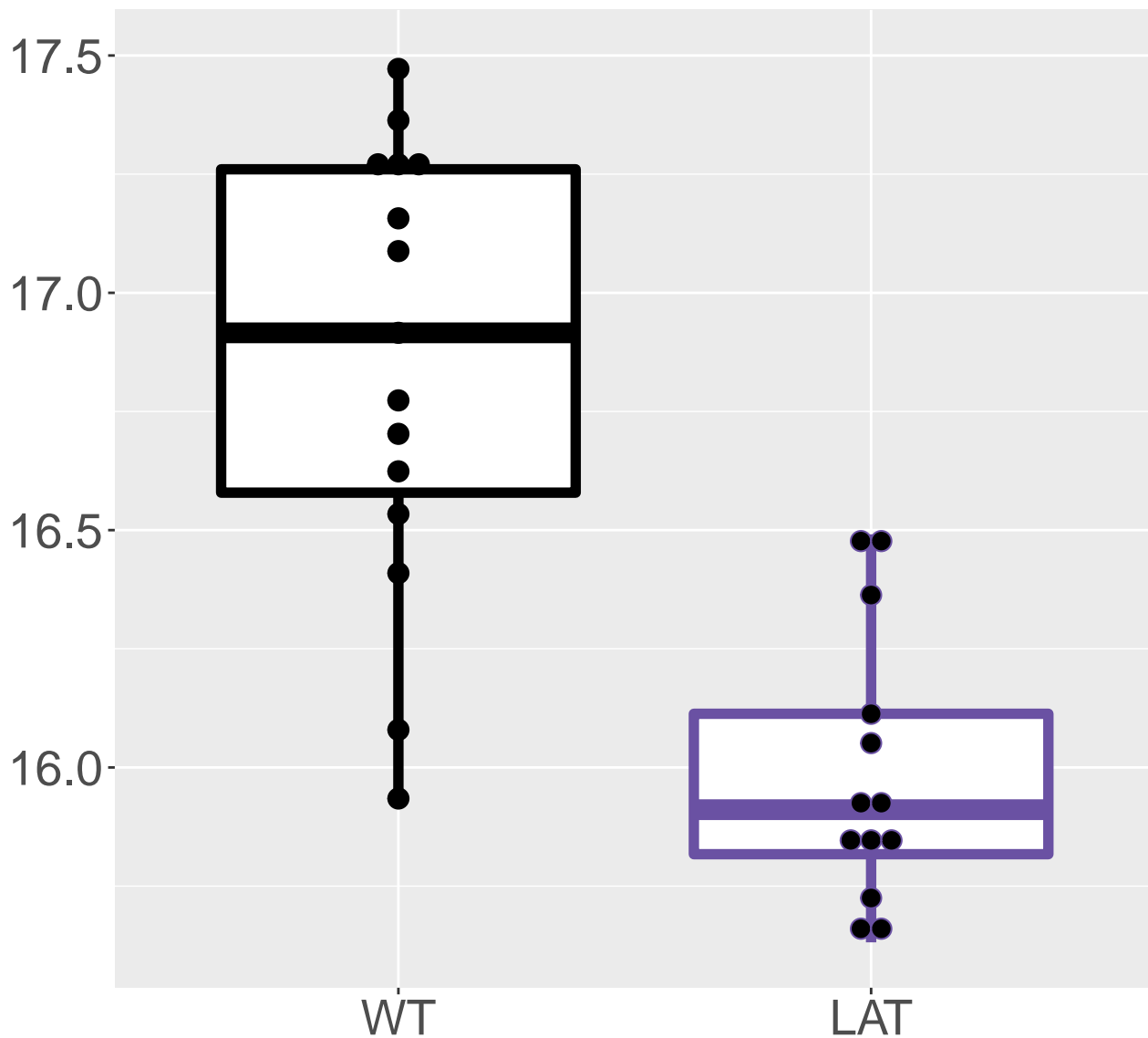
**M710.2017T622.25**

**FDR =  $8.4e-05$ , FC =  $-0.84$**



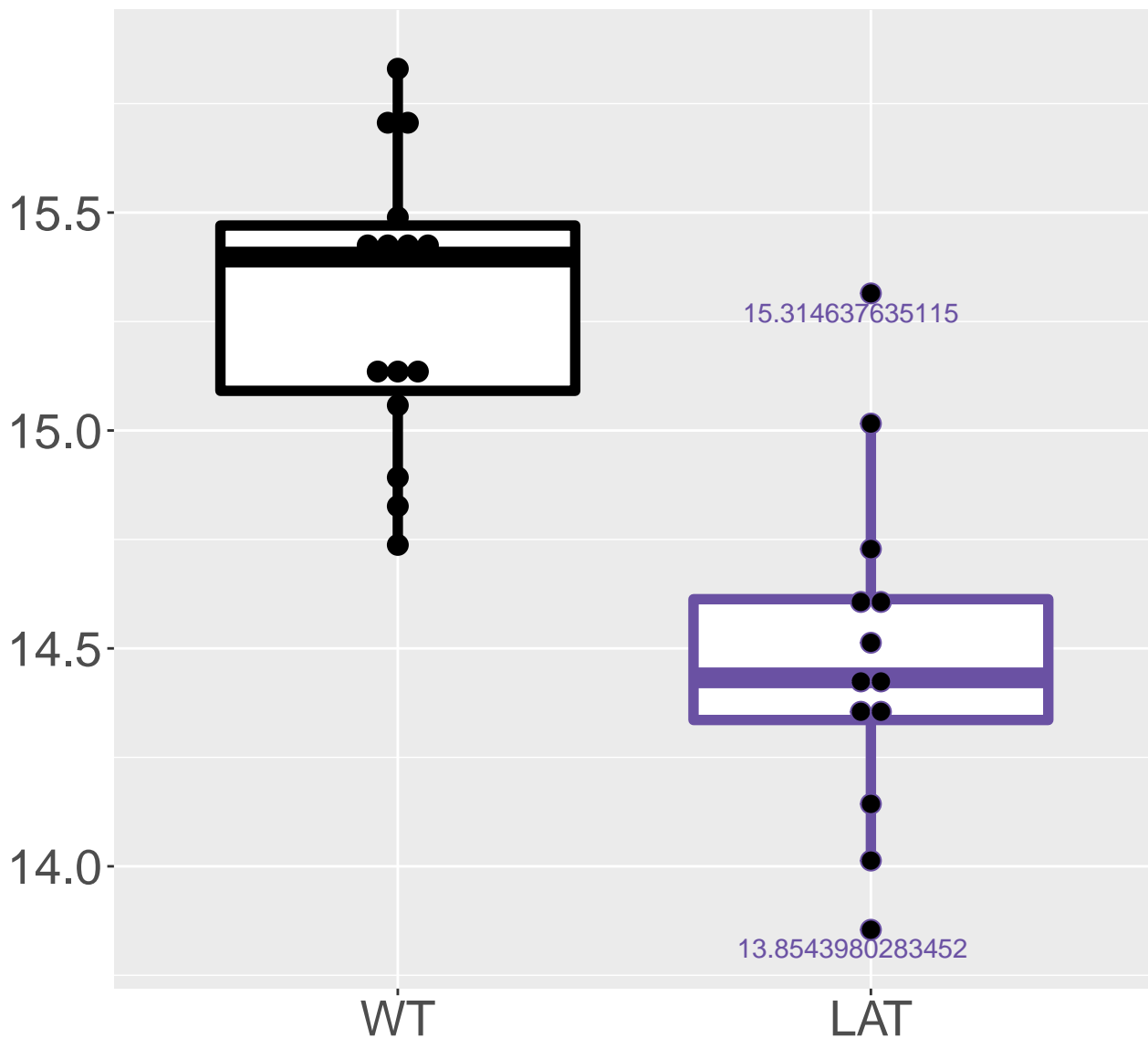
**M353.6113T626.31\_1**

**FDR =  $8.5e-05$ , FC =  $-0.86$**



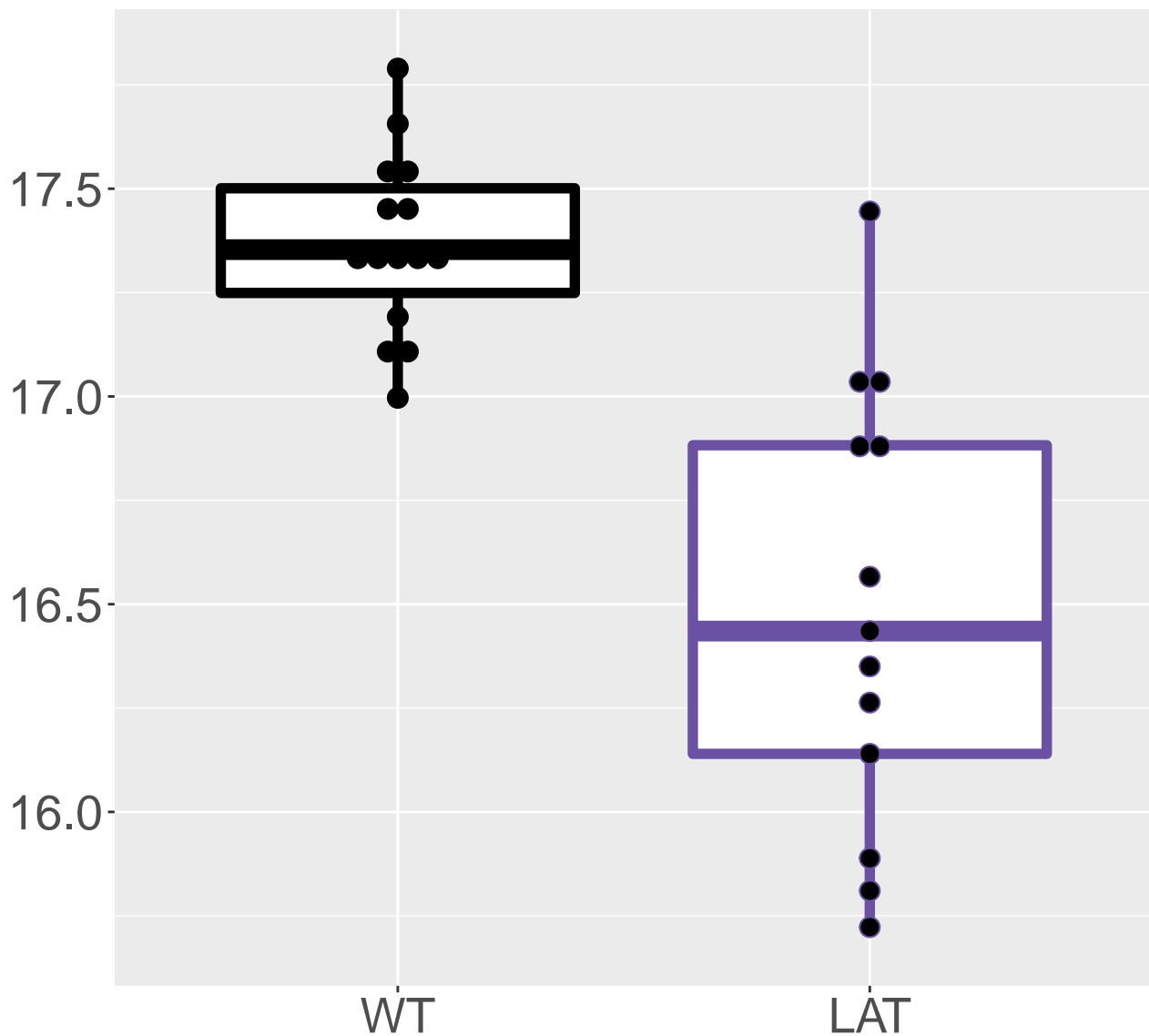
**M795.2294T619.08**

**FDR =  $9e-05$ , FC =  $-0.8$**



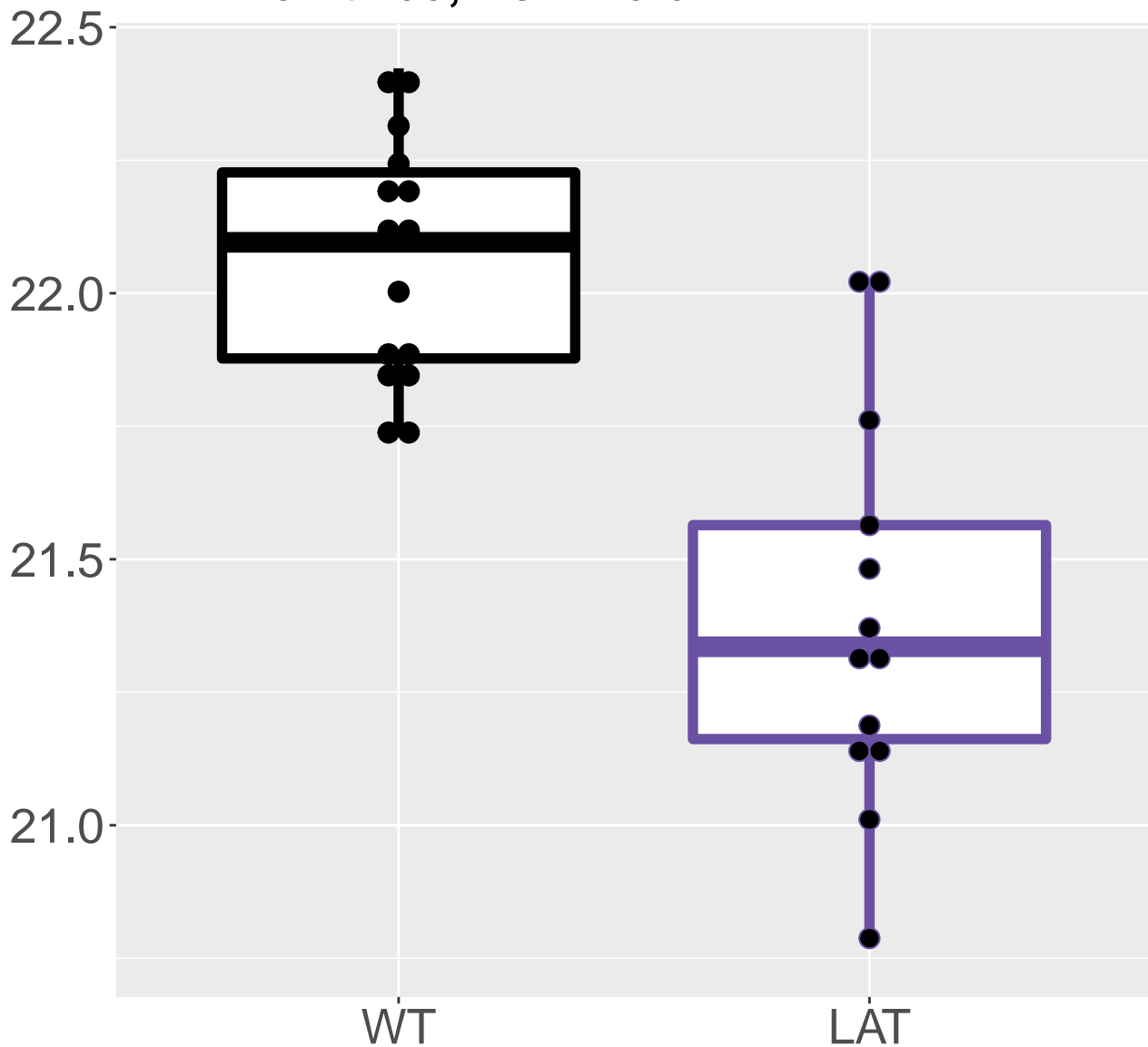
**M804.2349T571.96**

**FDR =  $9.1\text{e-}05$ , FC =  $-0.87$**



**M263.0776T537.22**

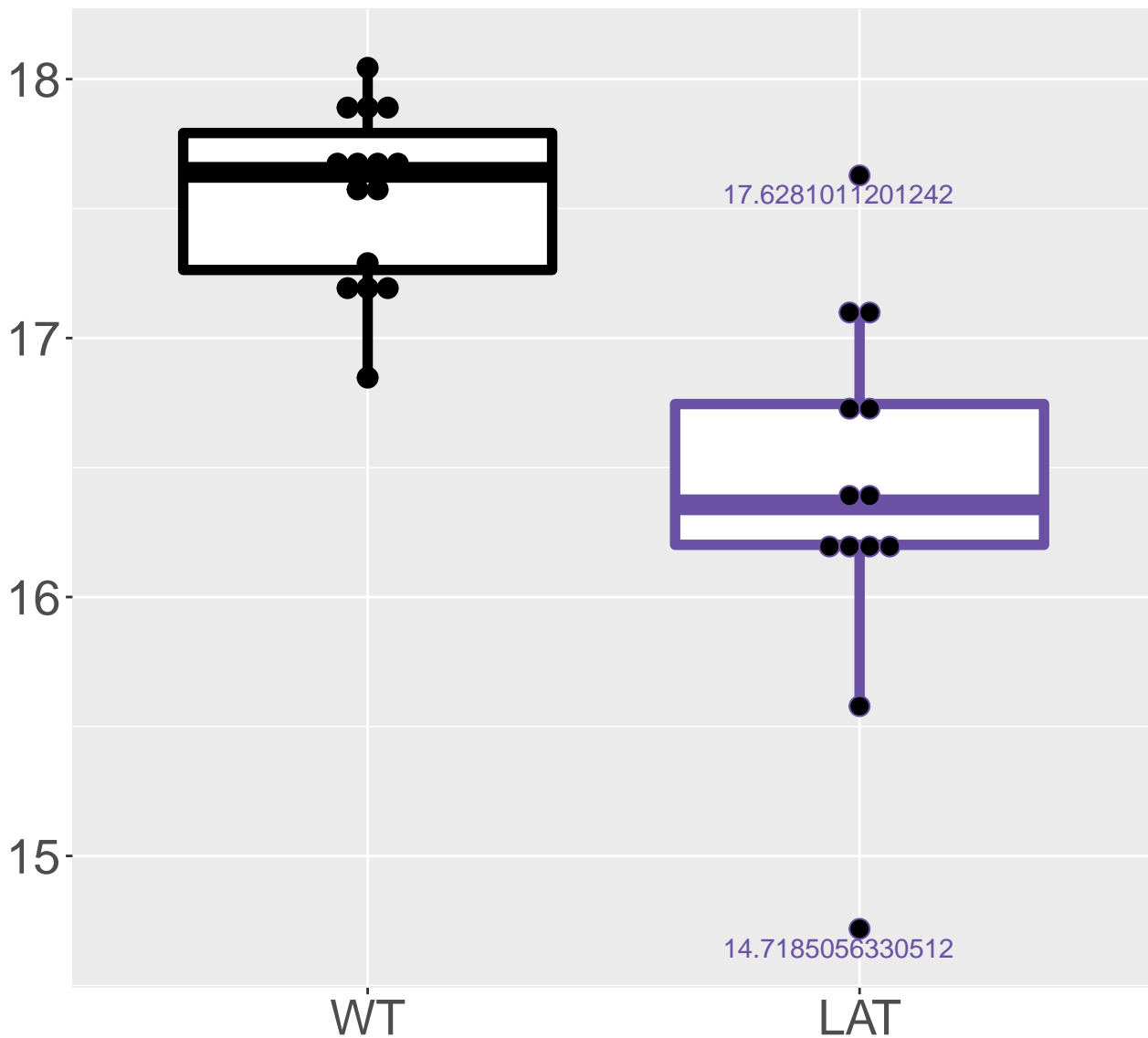
**FDR =  $9.1\text{e-}05$ , FC =  $-0.67$**





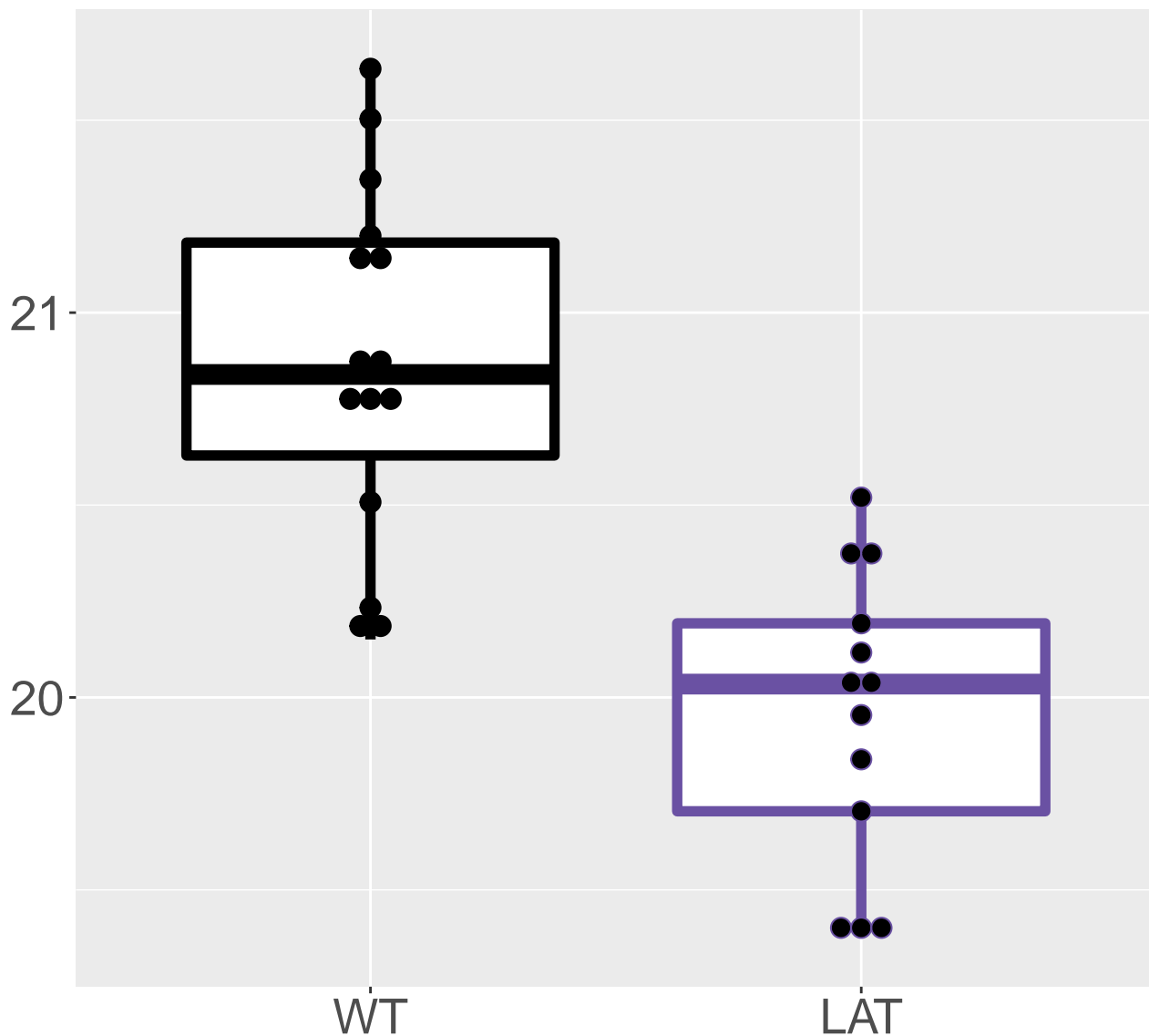
**M809.238T589.52**

**FDR =  $9.4e-05$ , FC =  $-1.2$**



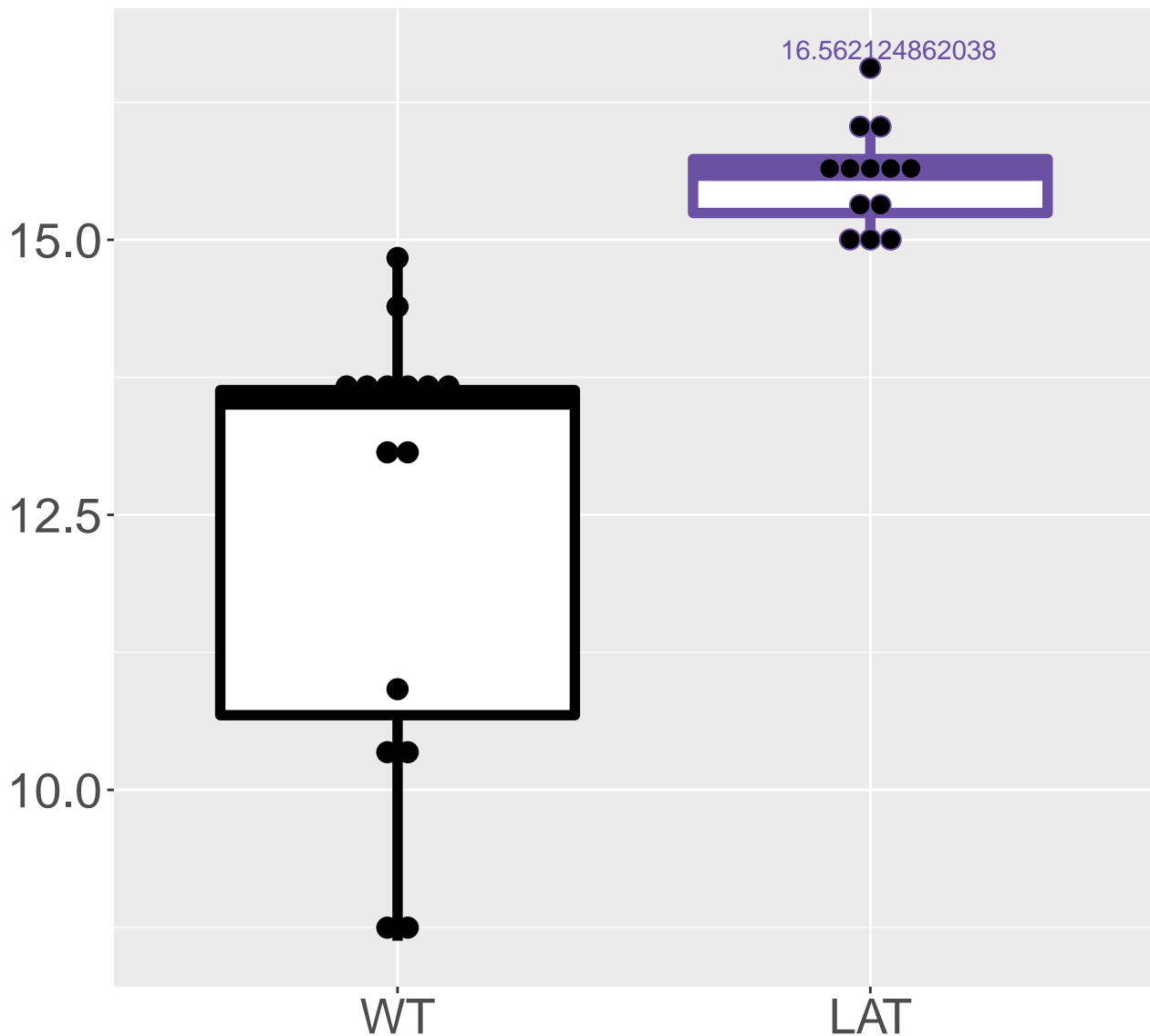
**M308.0992T562.35**

**FDR =  $9.4\text{e-}05$ , FC =  $-0.93$**



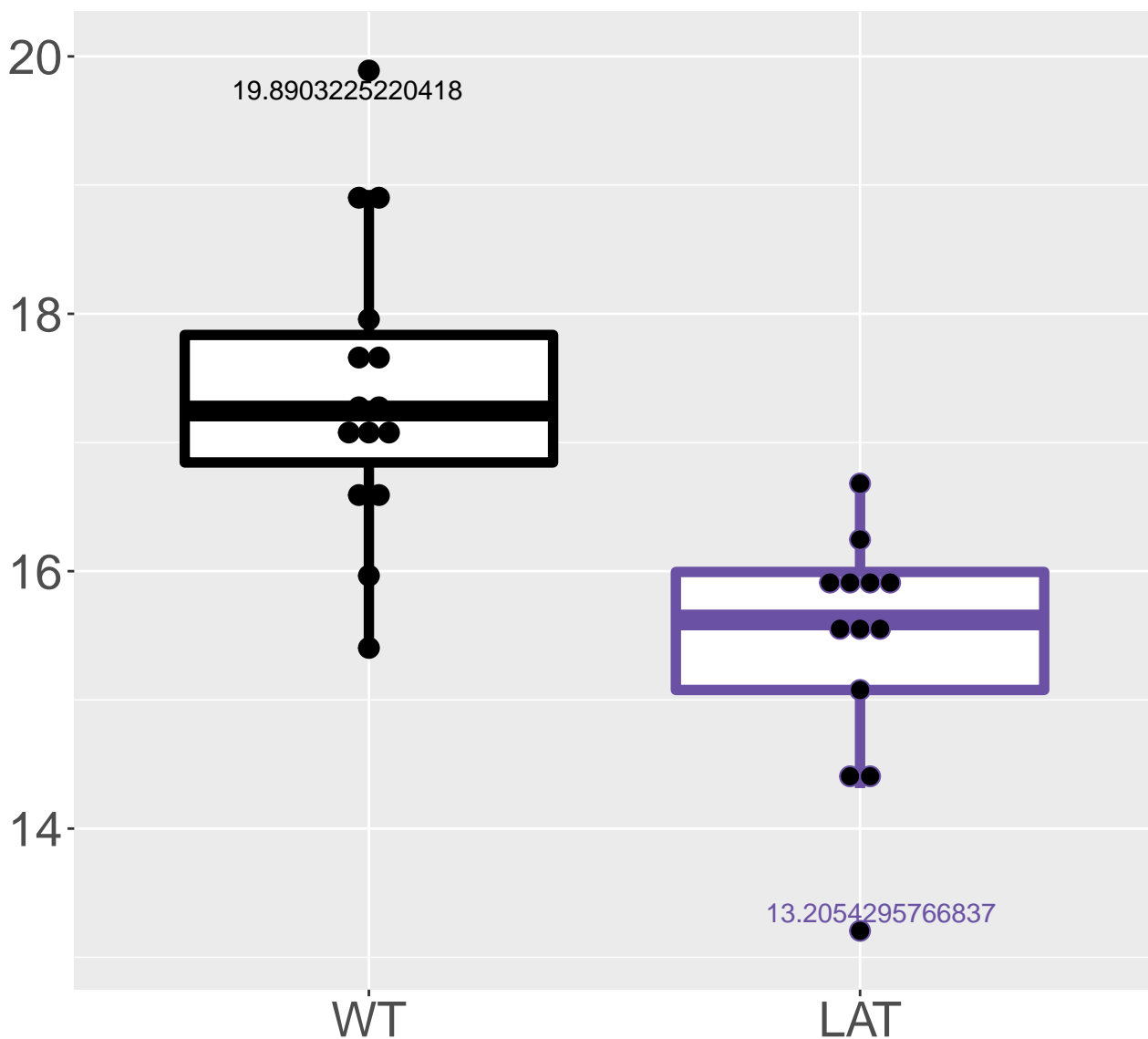
**M271.0233T507.55**

**FDR =  $9.9e-05$ , FC = 3.2**



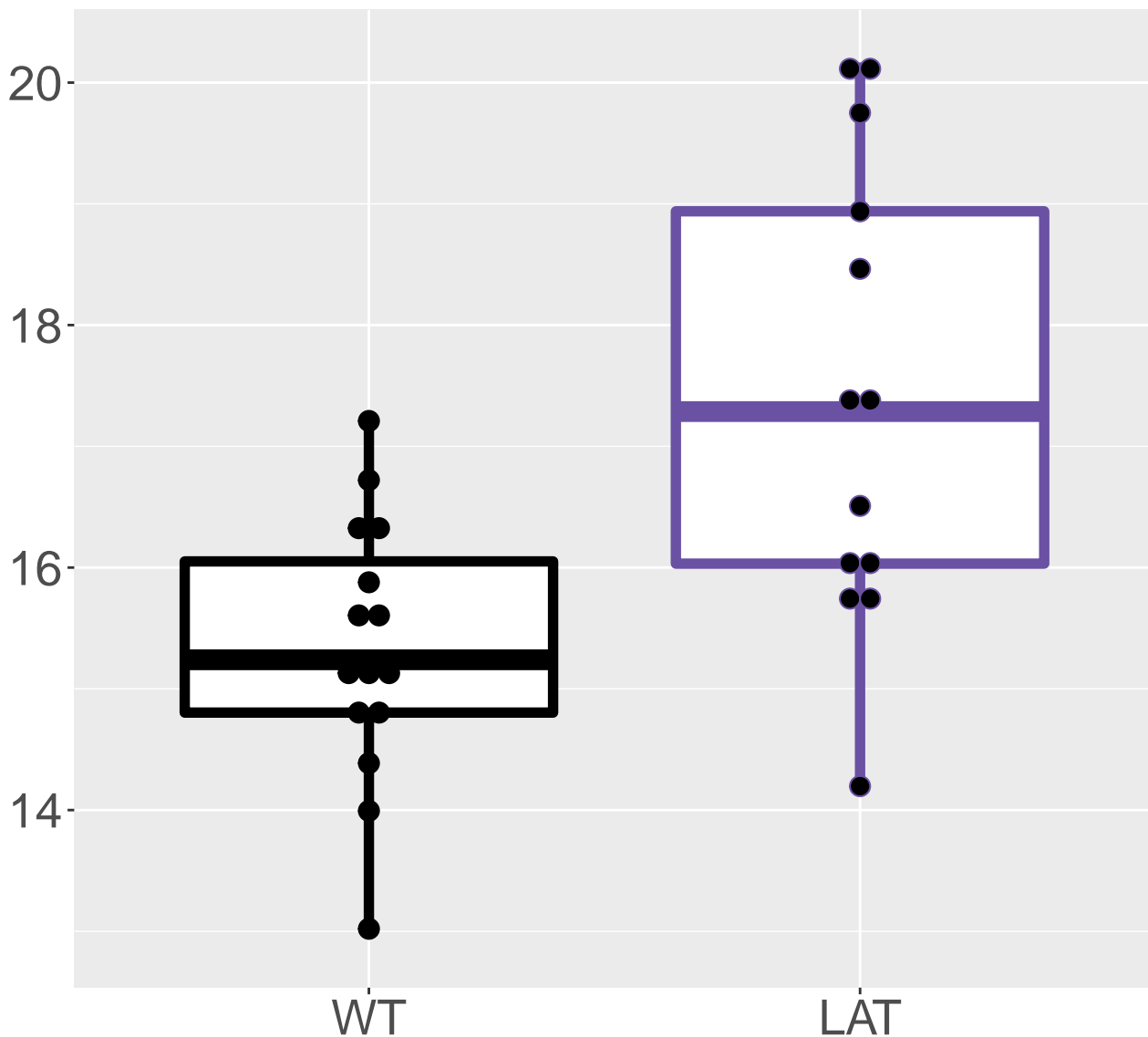
# Deoxyuridine;2'-Deoxyuridine

FDR = 1e-04, FC = -2

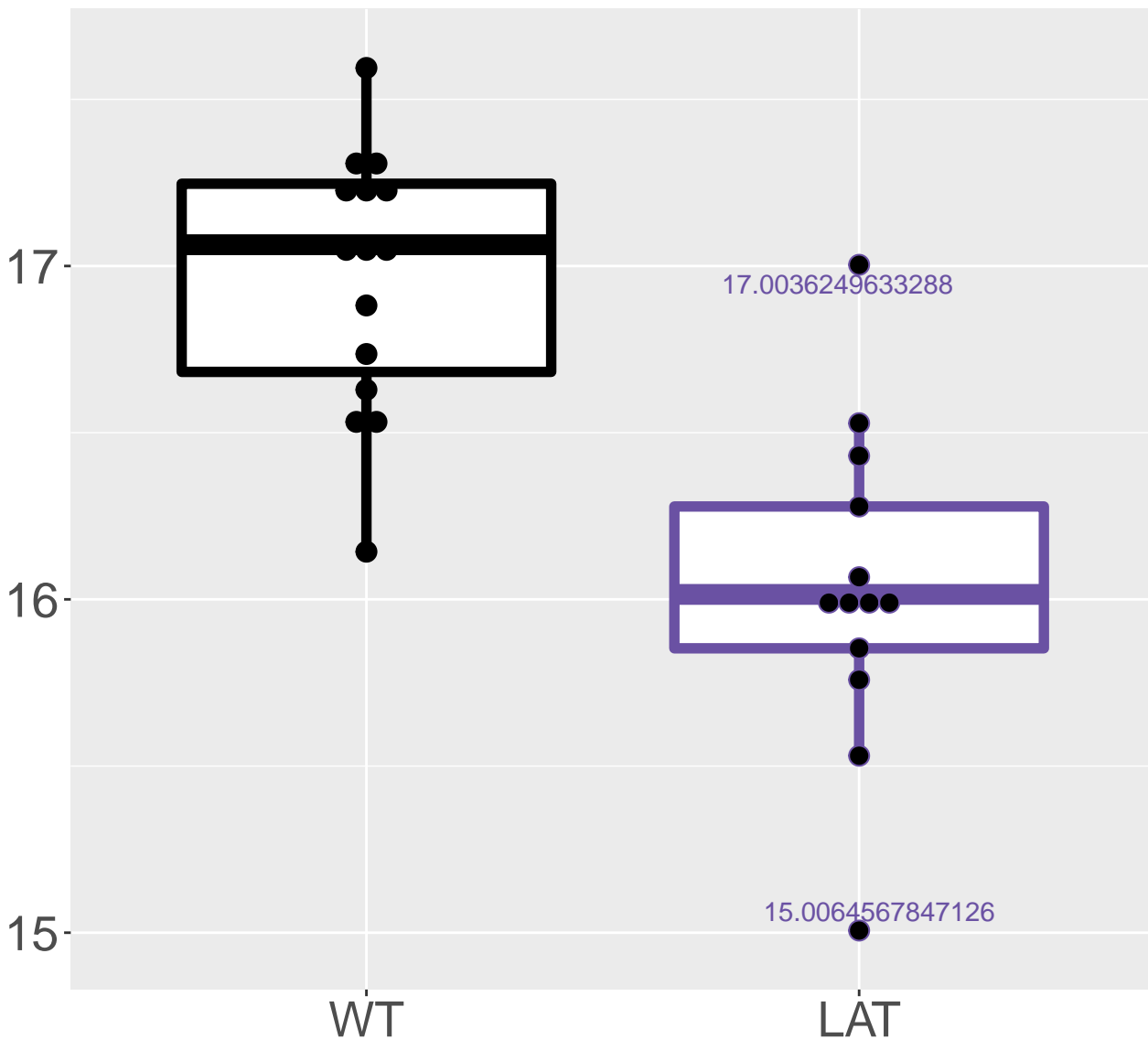


**M180.5218T585.61**

**FDR = 1e-04, FC = 2.1, sex\*\*\***

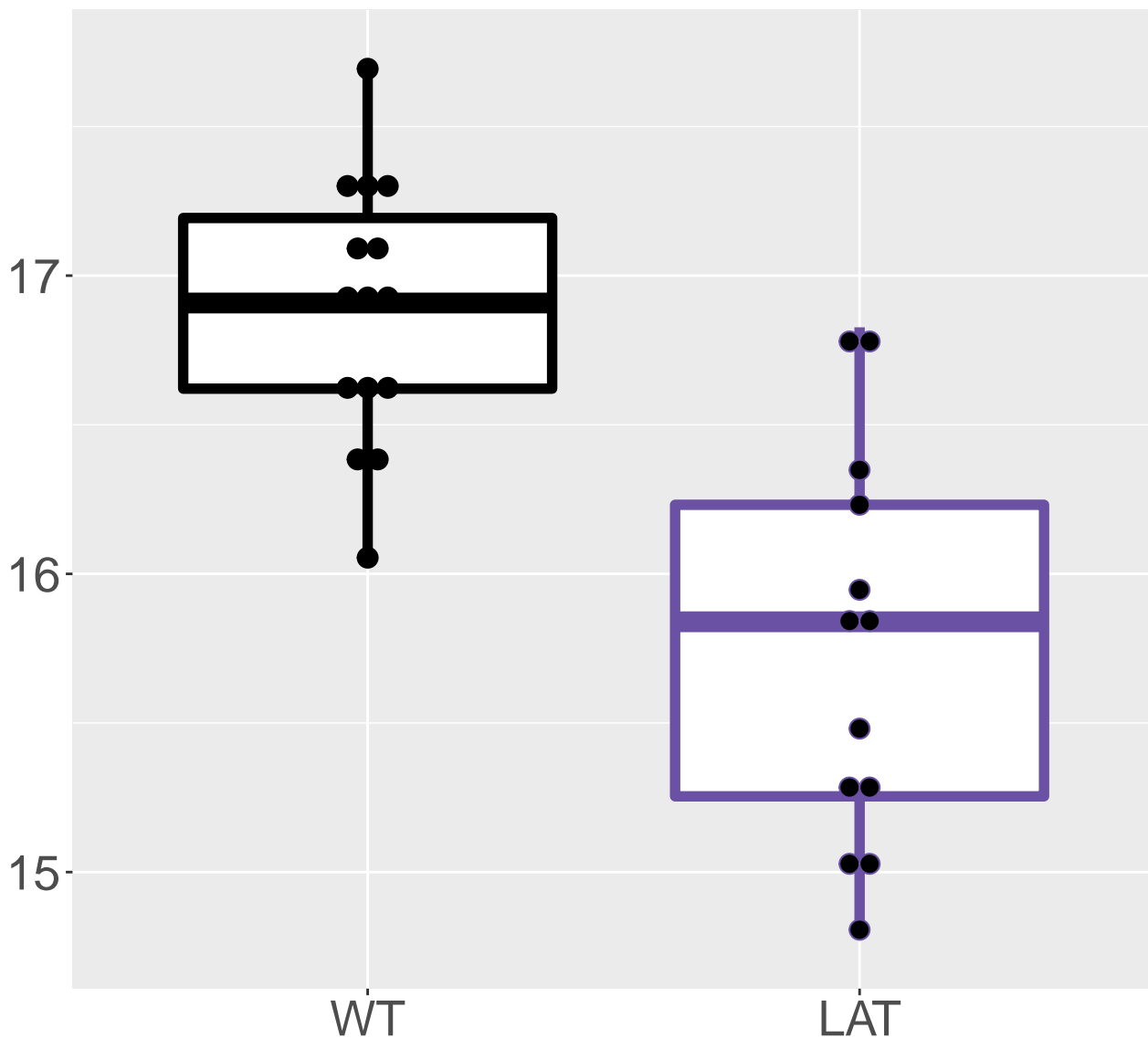


**M548.6503T620.03\_1**  
**FDR = 1e-04, FC = -0.93**



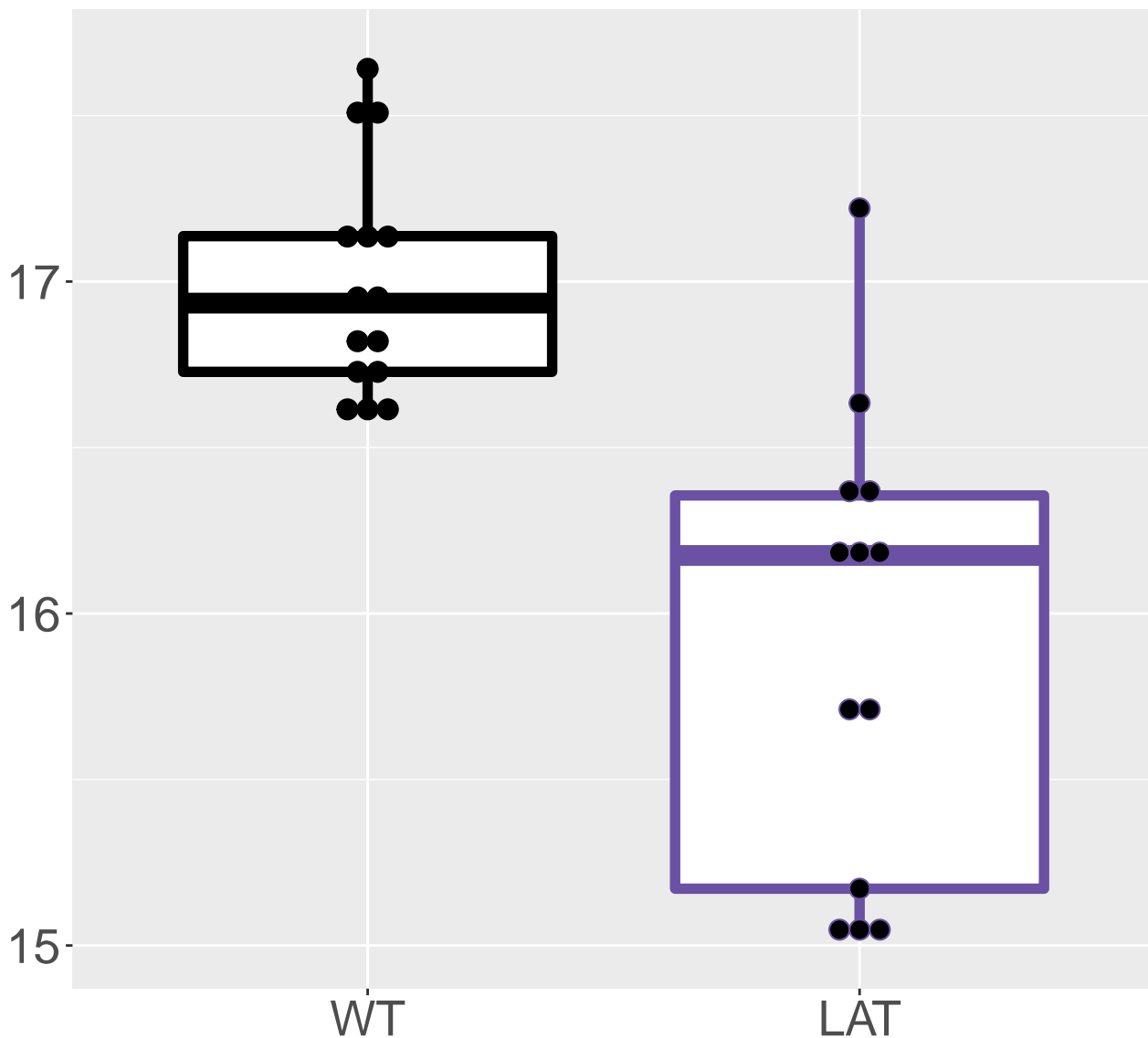
**M591.1795T514.65**

**FDR = 0.00011, FC = -1.1**



**M845.2778T568.04**

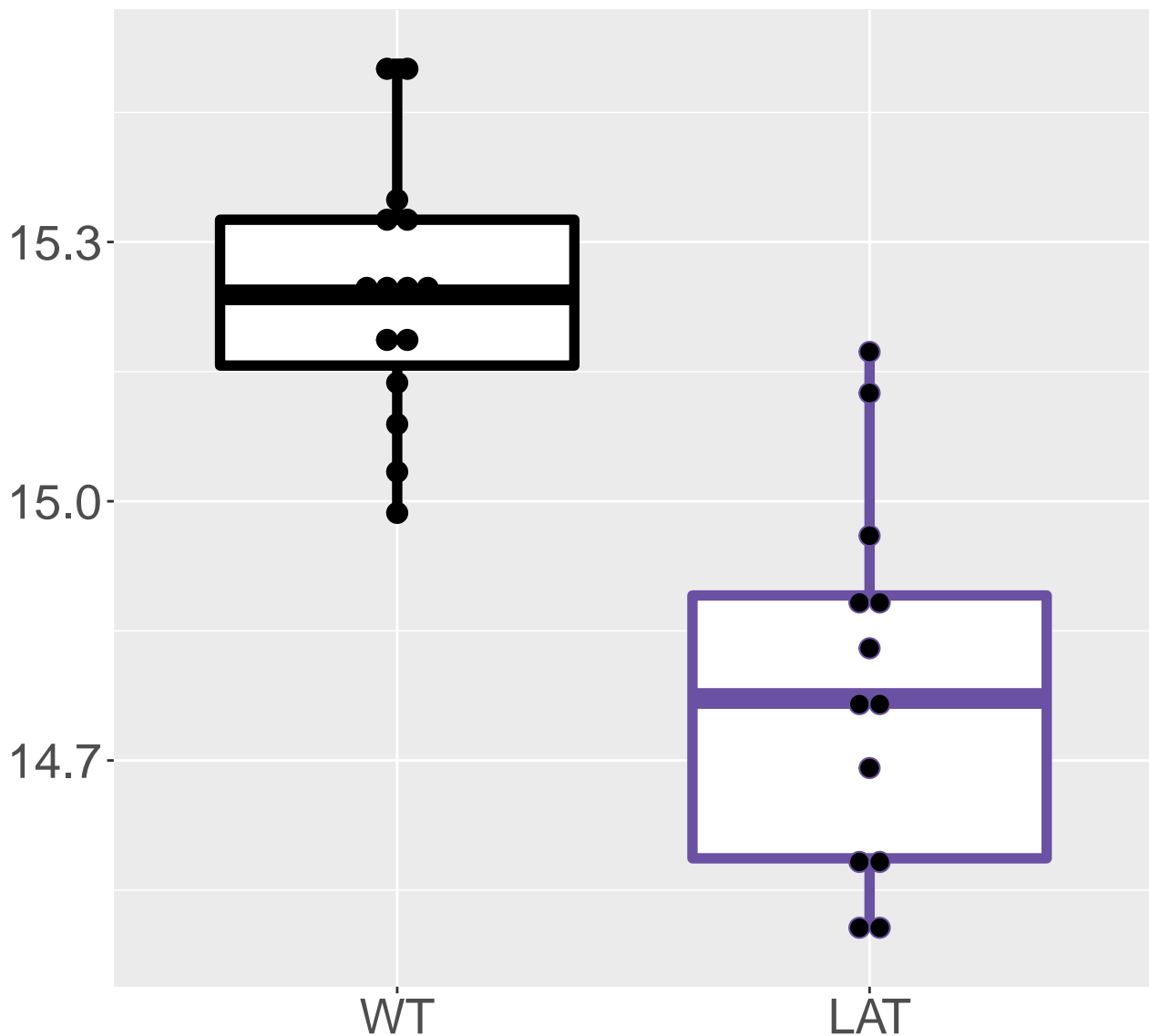
**FDR = 0.00011, FC = -1.1**





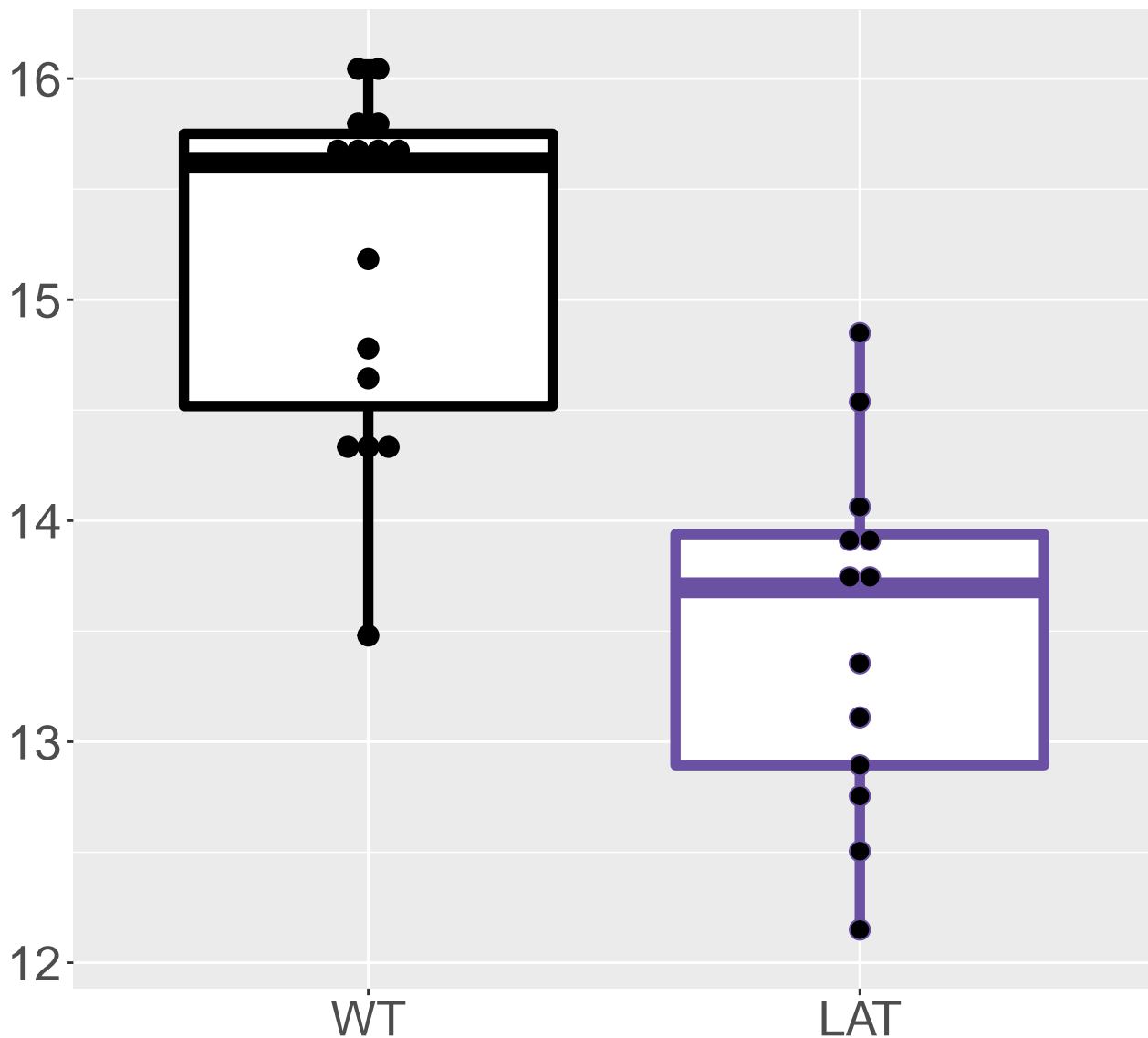
**M786.2244T669.24**

**FDR = 0.00011, FC = -0.45**



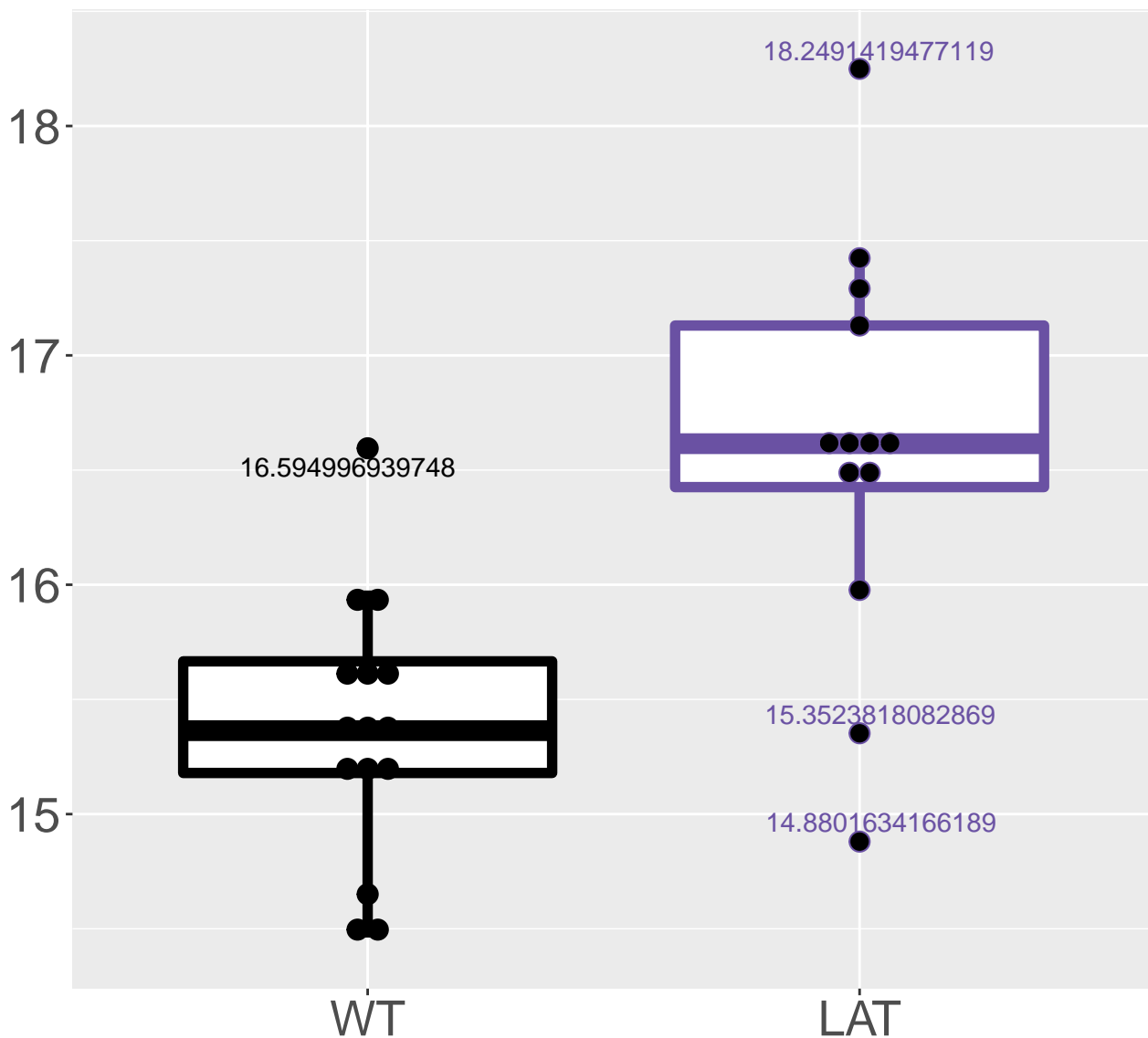
**M412.6388T610.32**

**FDR = 0.00011, FC = -1.7**

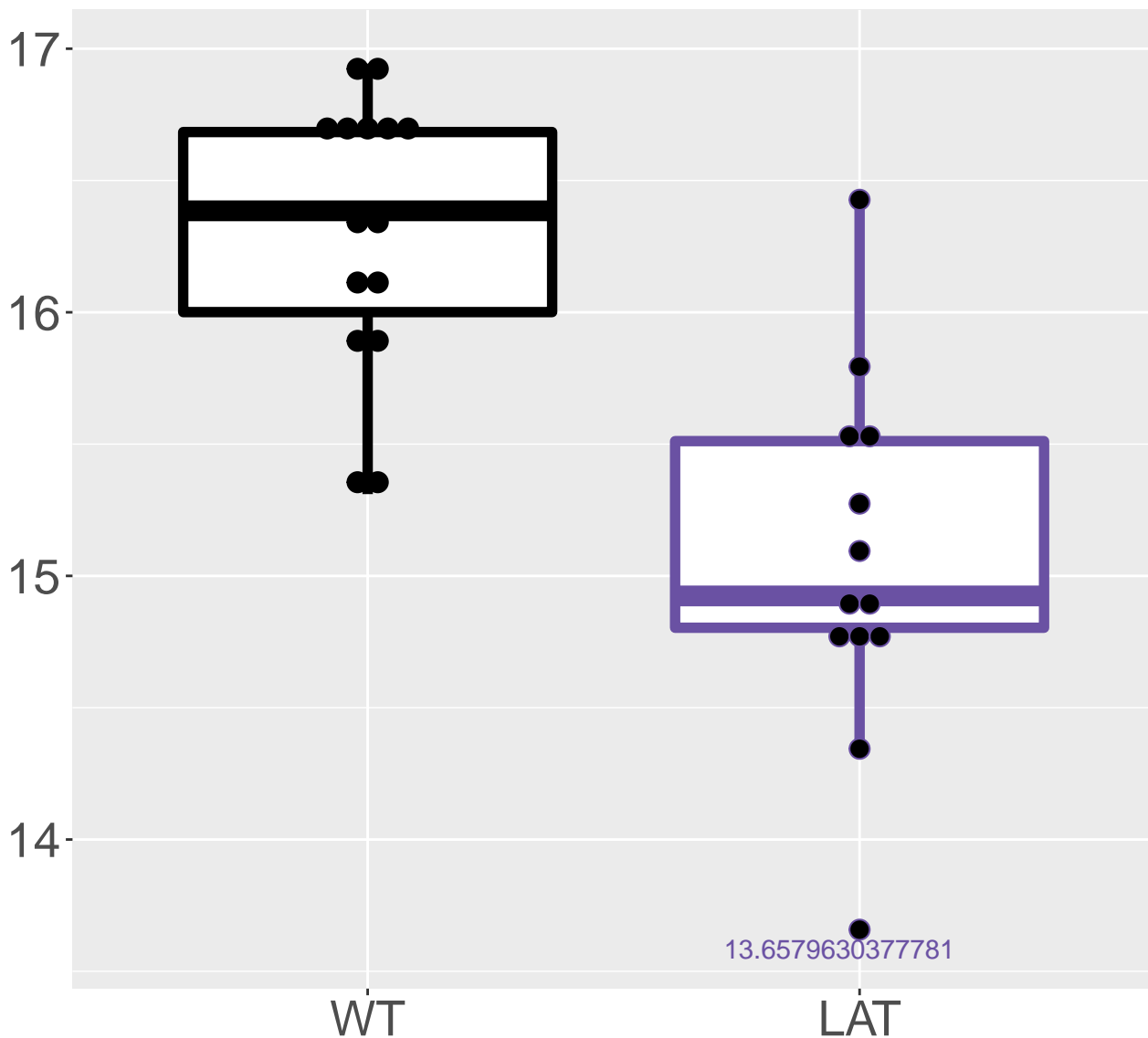


**M301.0729T199.59**

**FDR = 0.00011, FC = 1.2, sex\***

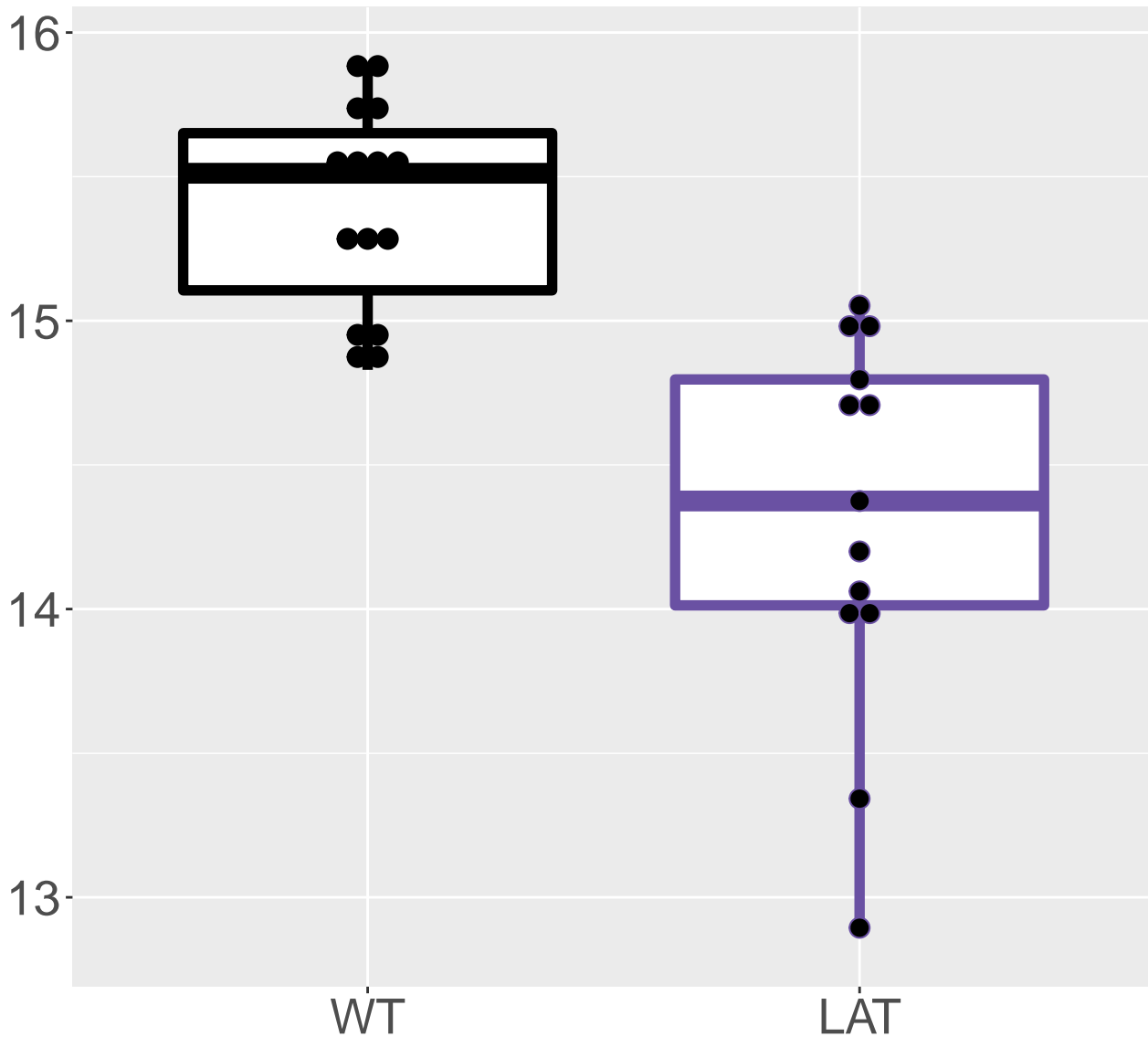


**M962.2843T621.1**  
**FDR = 0.00011, FC = -1.3**

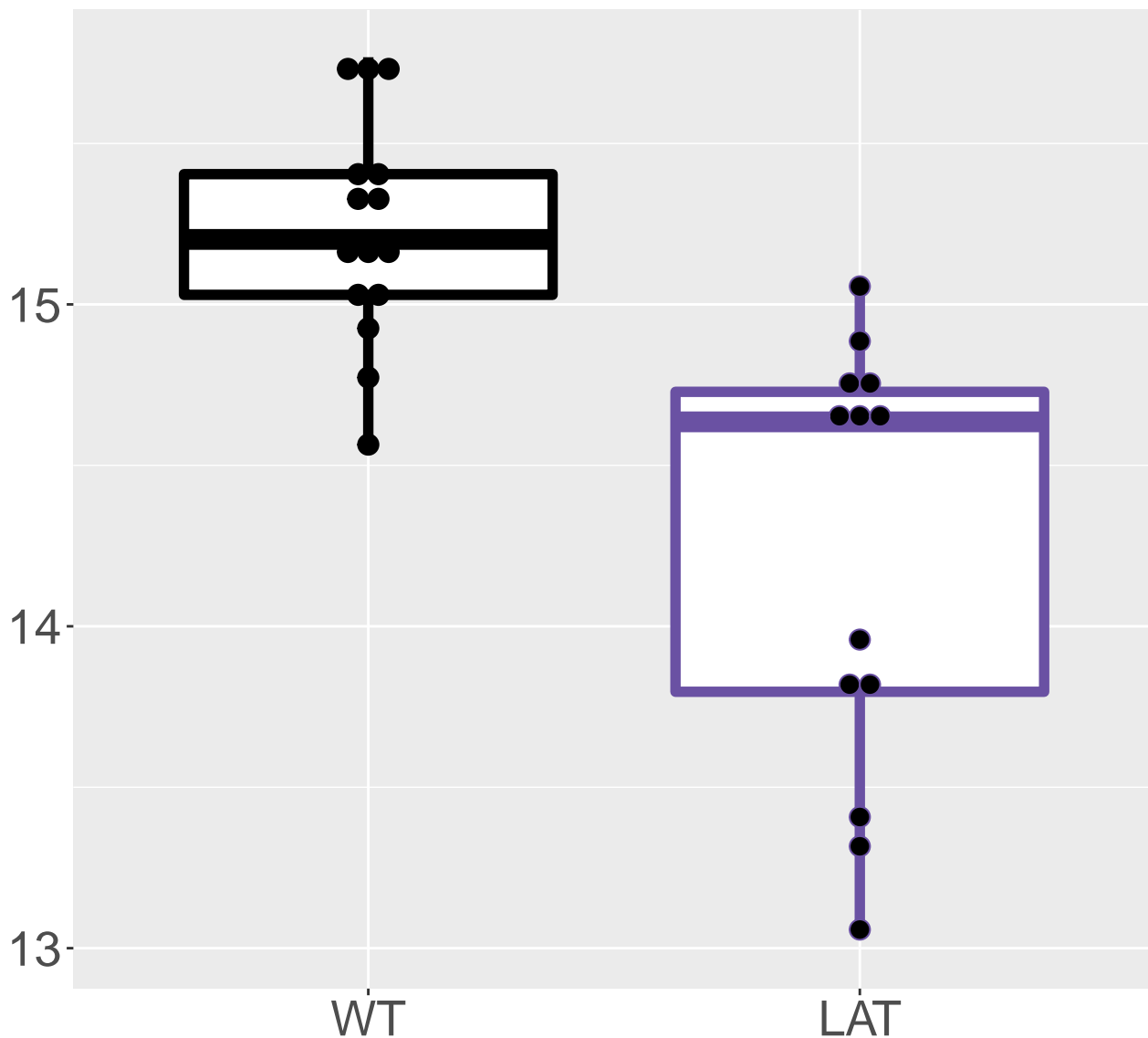


**M433.1401T496.11**

**FDR = 0.00011, FC = -1.1**

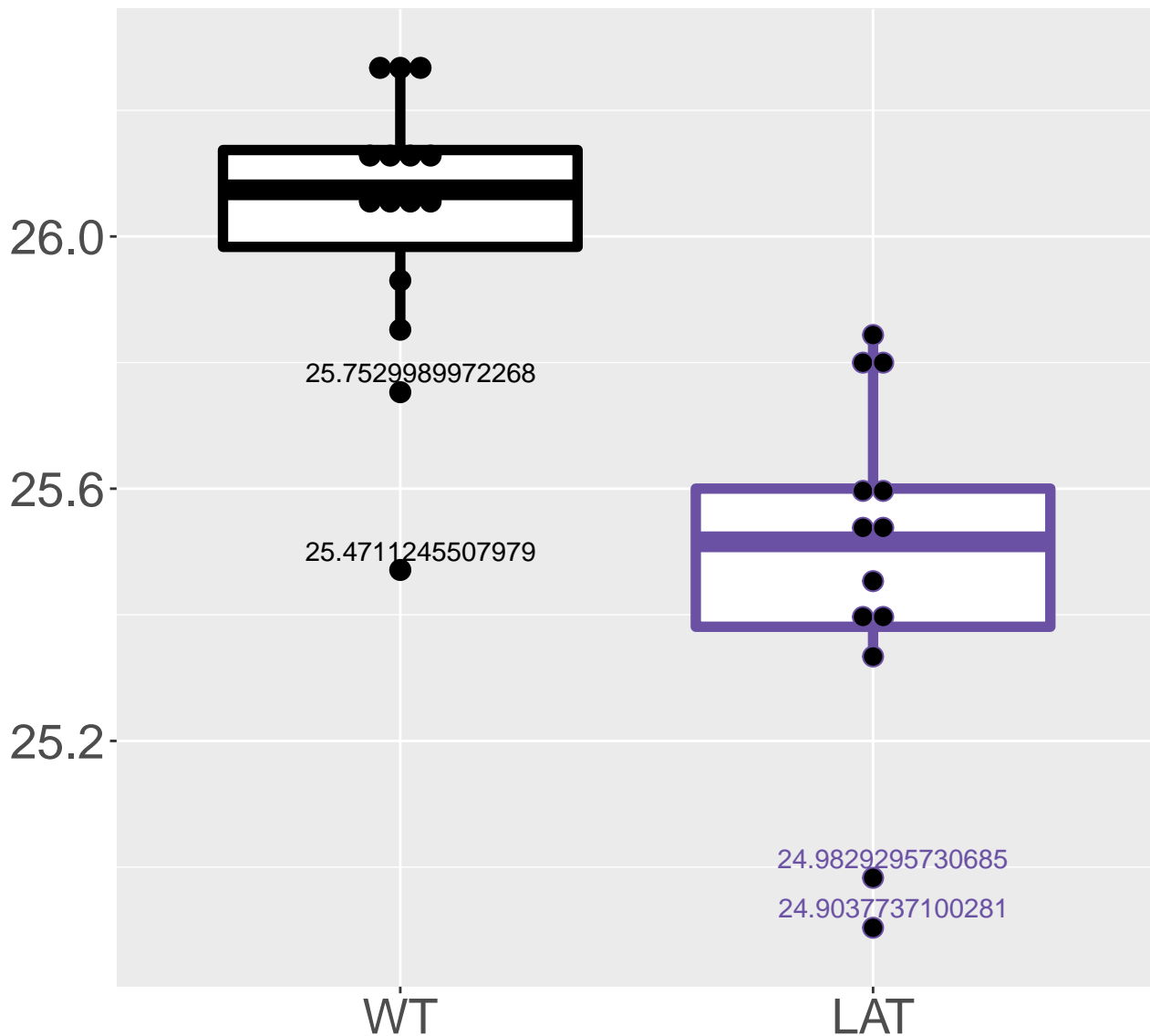


**M153.0418T156.95**  
**FDR = 0.00012, FC = -1**



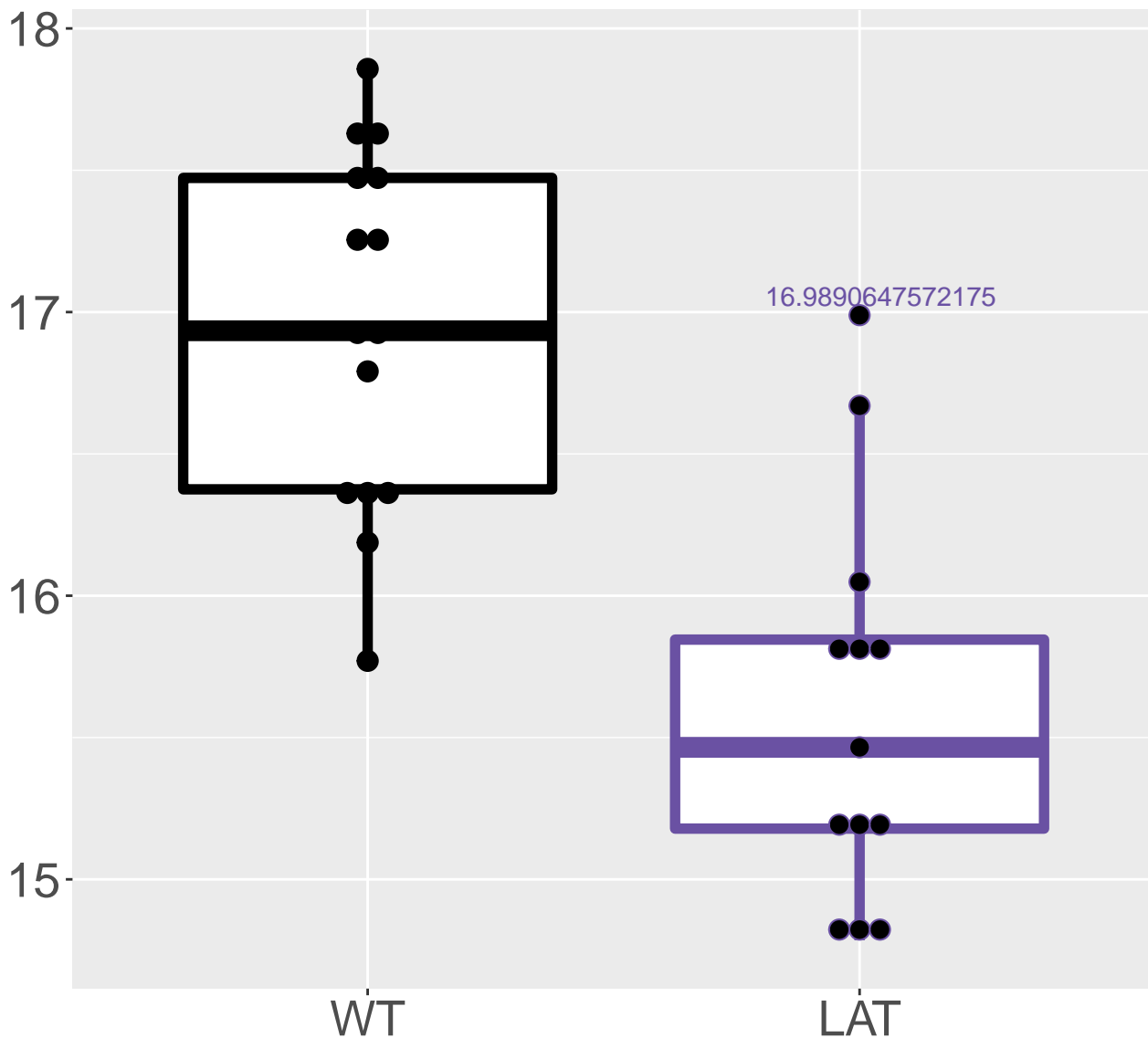
# L-Phenylalanine; Phenylalanine

FDR = 0.00012, FC = -0.56



**M746.242T619.18**

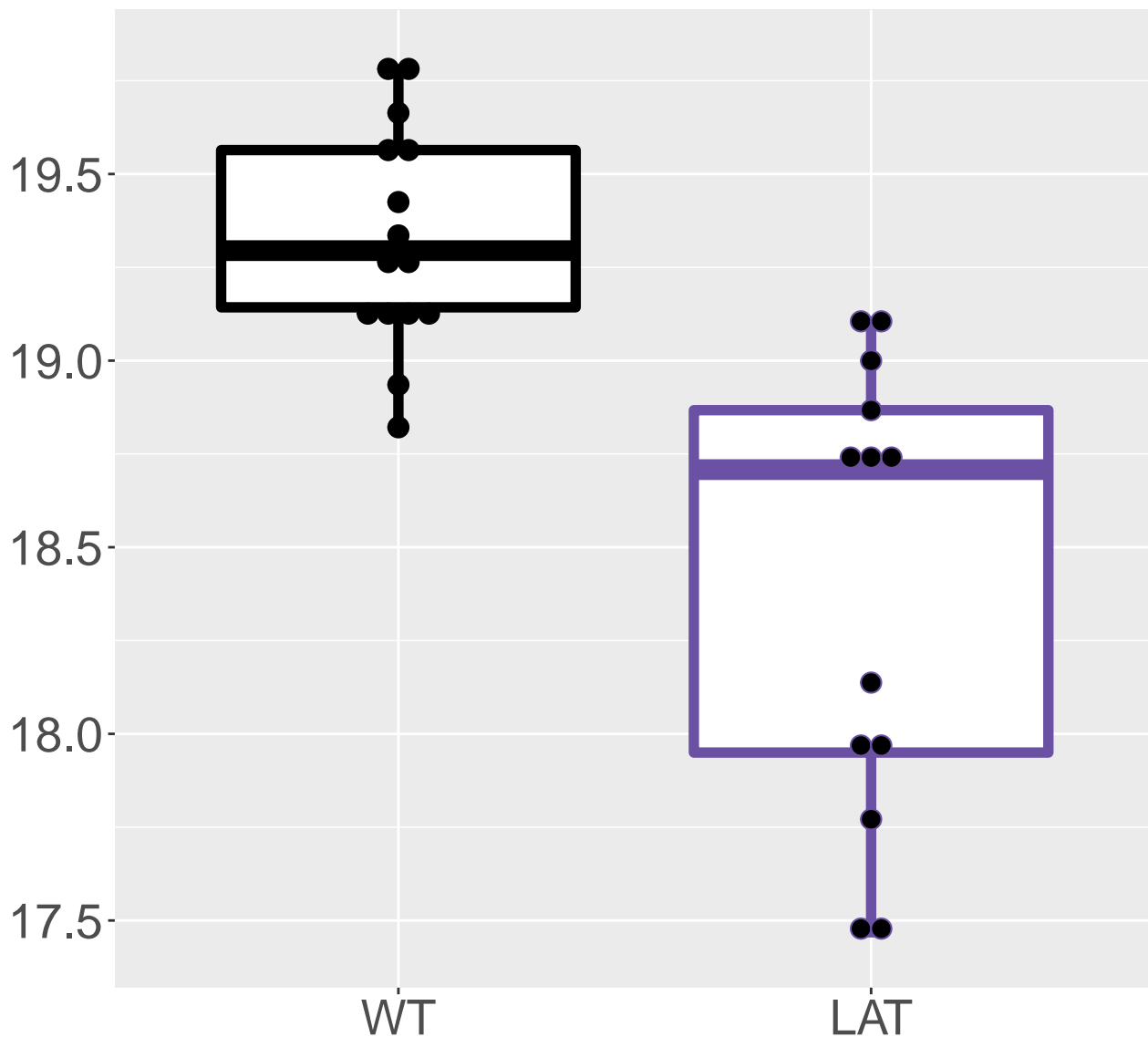
**FDR = 0.00012, FC = -1.4**





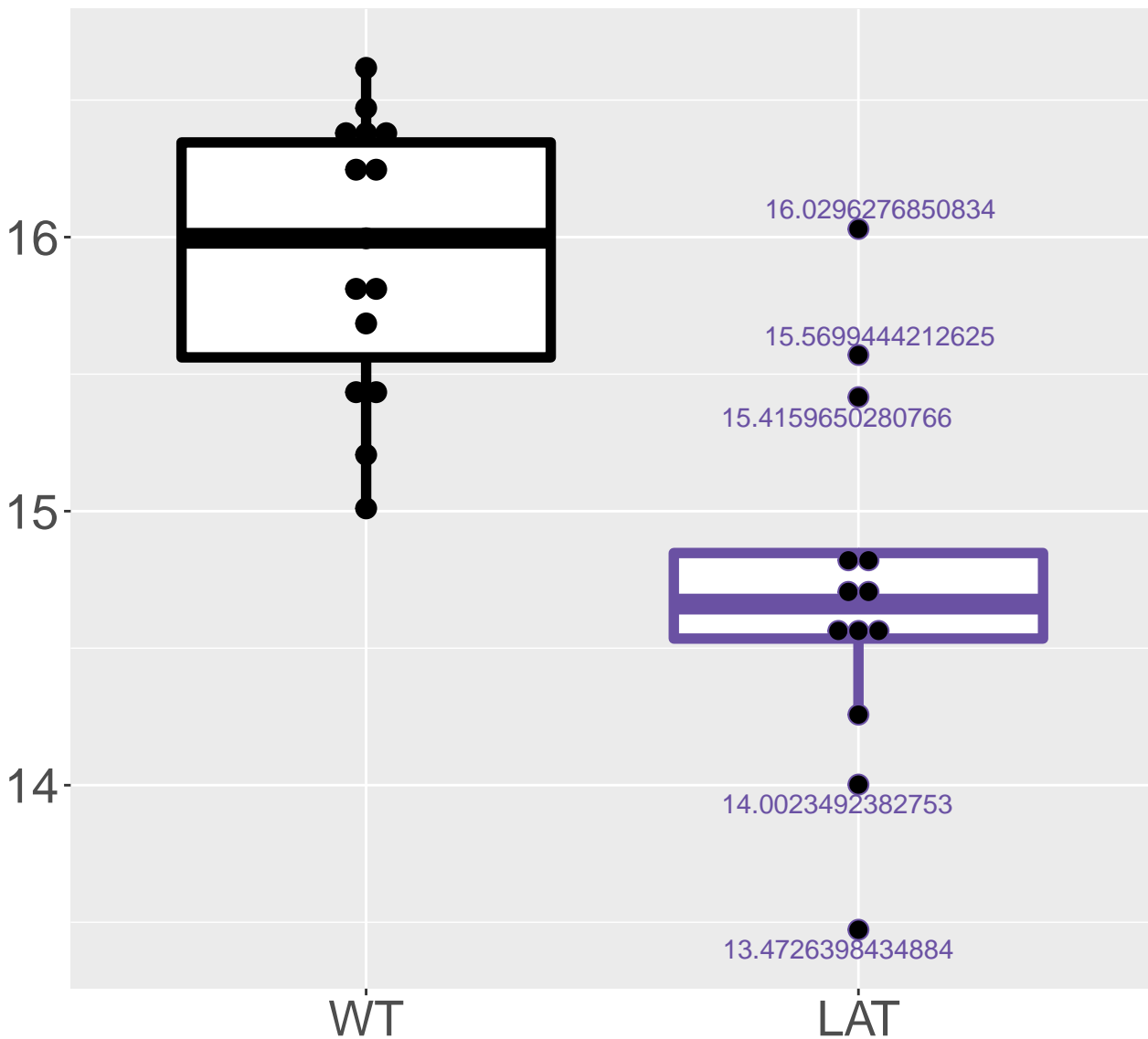
**M631.4738T76.96**

**FDR = 0.00012, FC = -0.94**



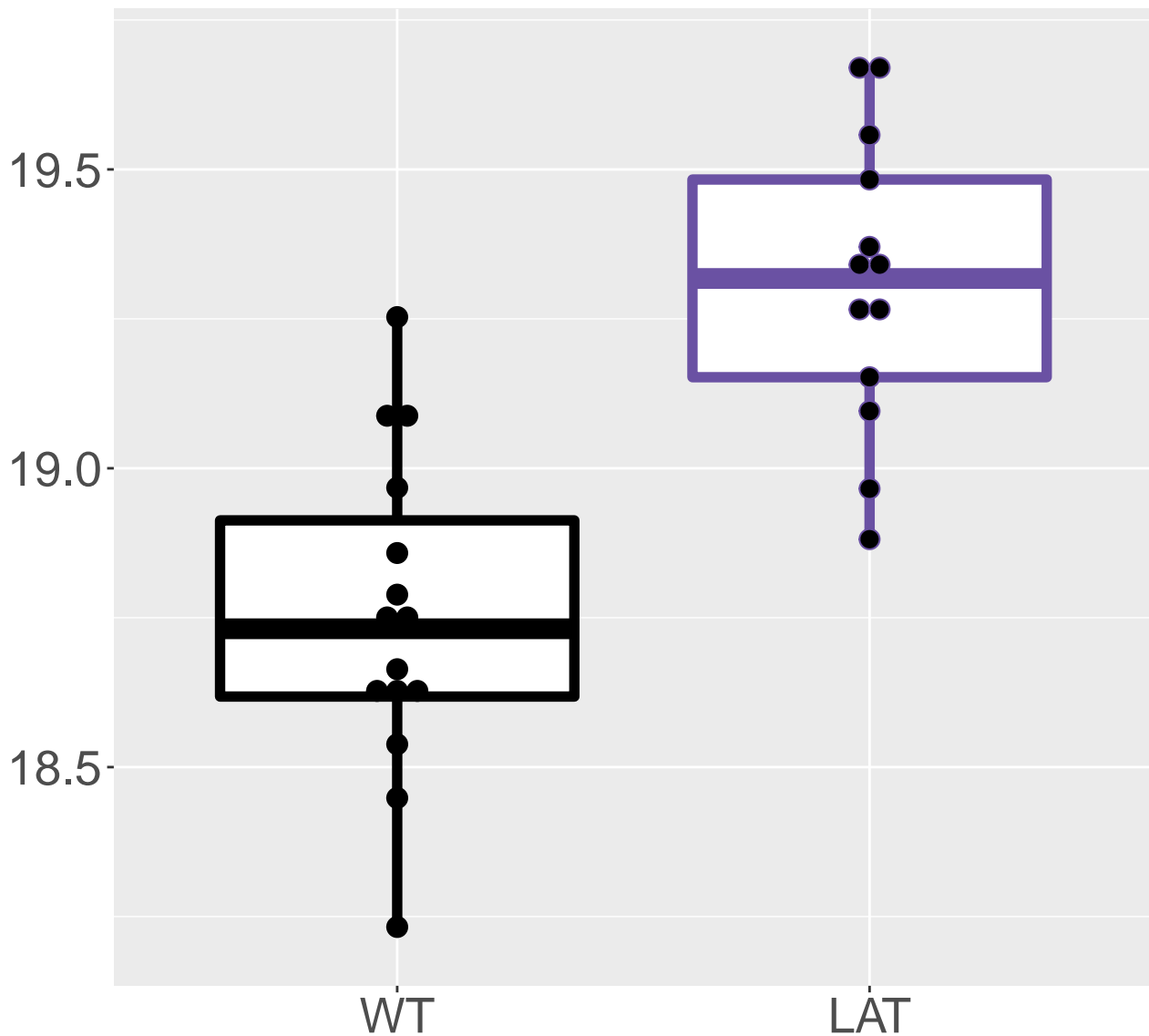
**M365.4311T620.01\_2**

**FDR = 0.00013,  $\overline{FC} = -1.2$**



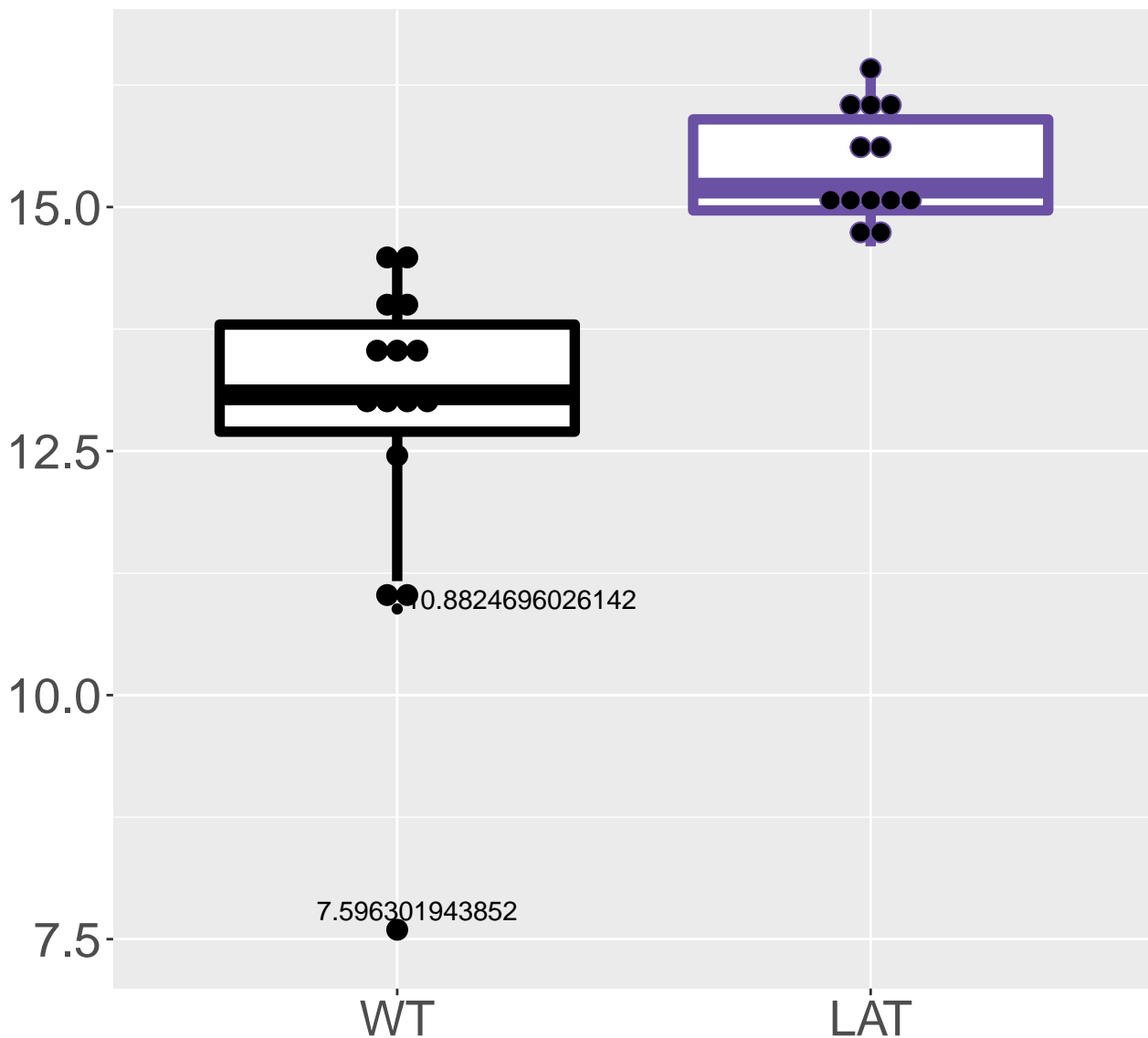
**M275.089T585.22**

**FDR = 0.00013, FC = 0.56**



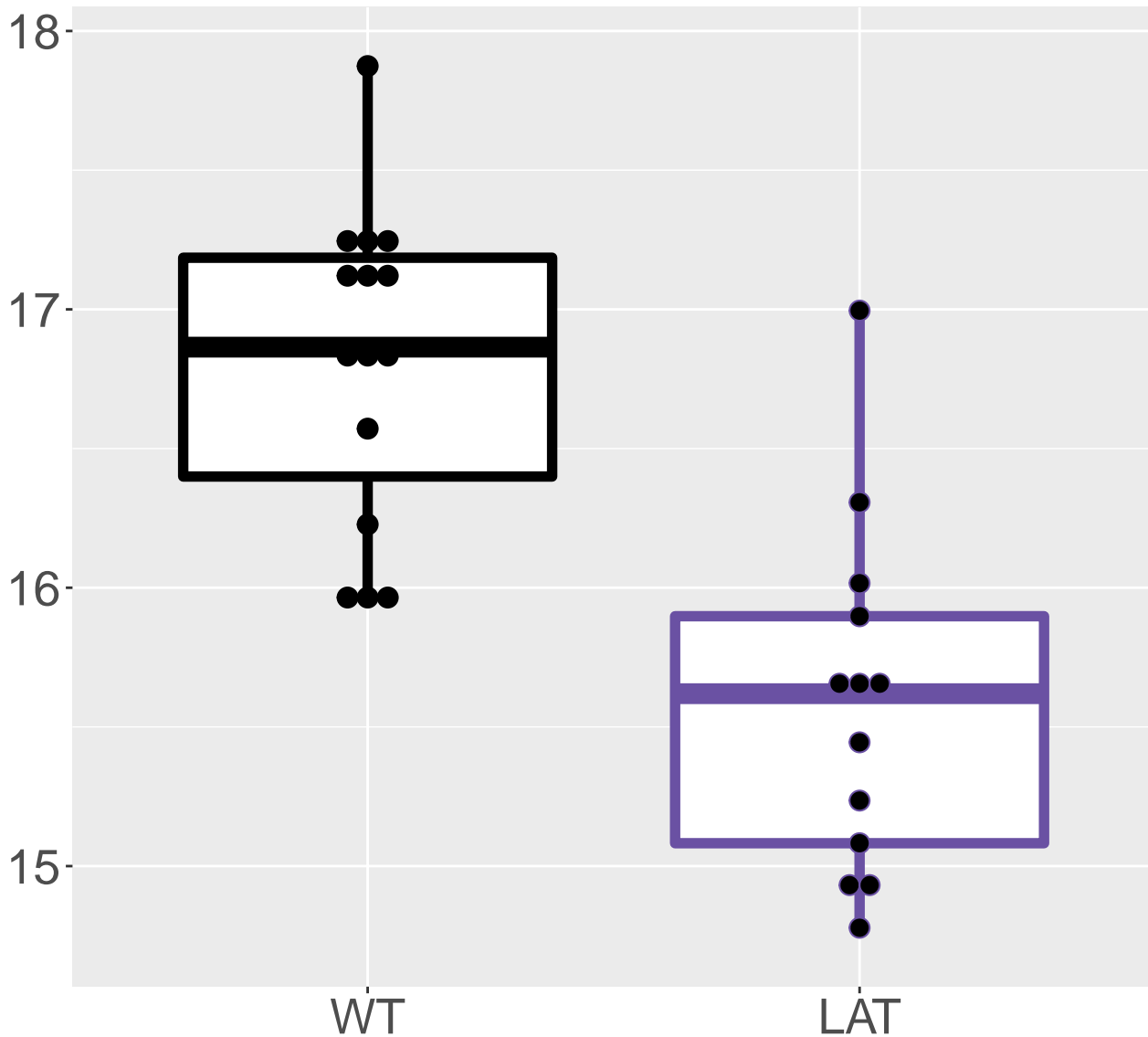
**M134.0389T622.73**

**FDR = 0.00013, FC = 2.6**



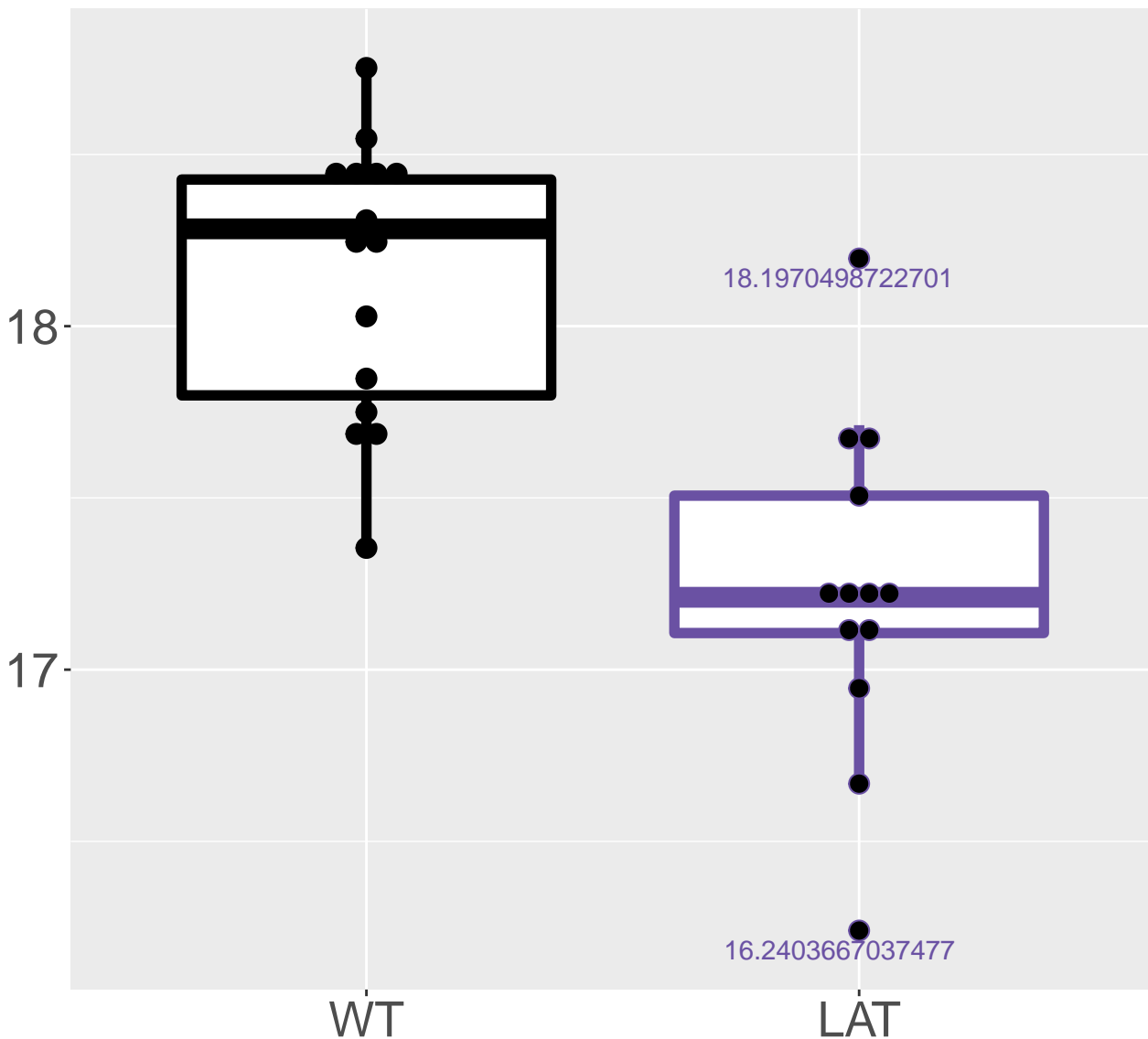
**M736.2525T560.3**

**FDR = 0.00013, FC = -1.2**



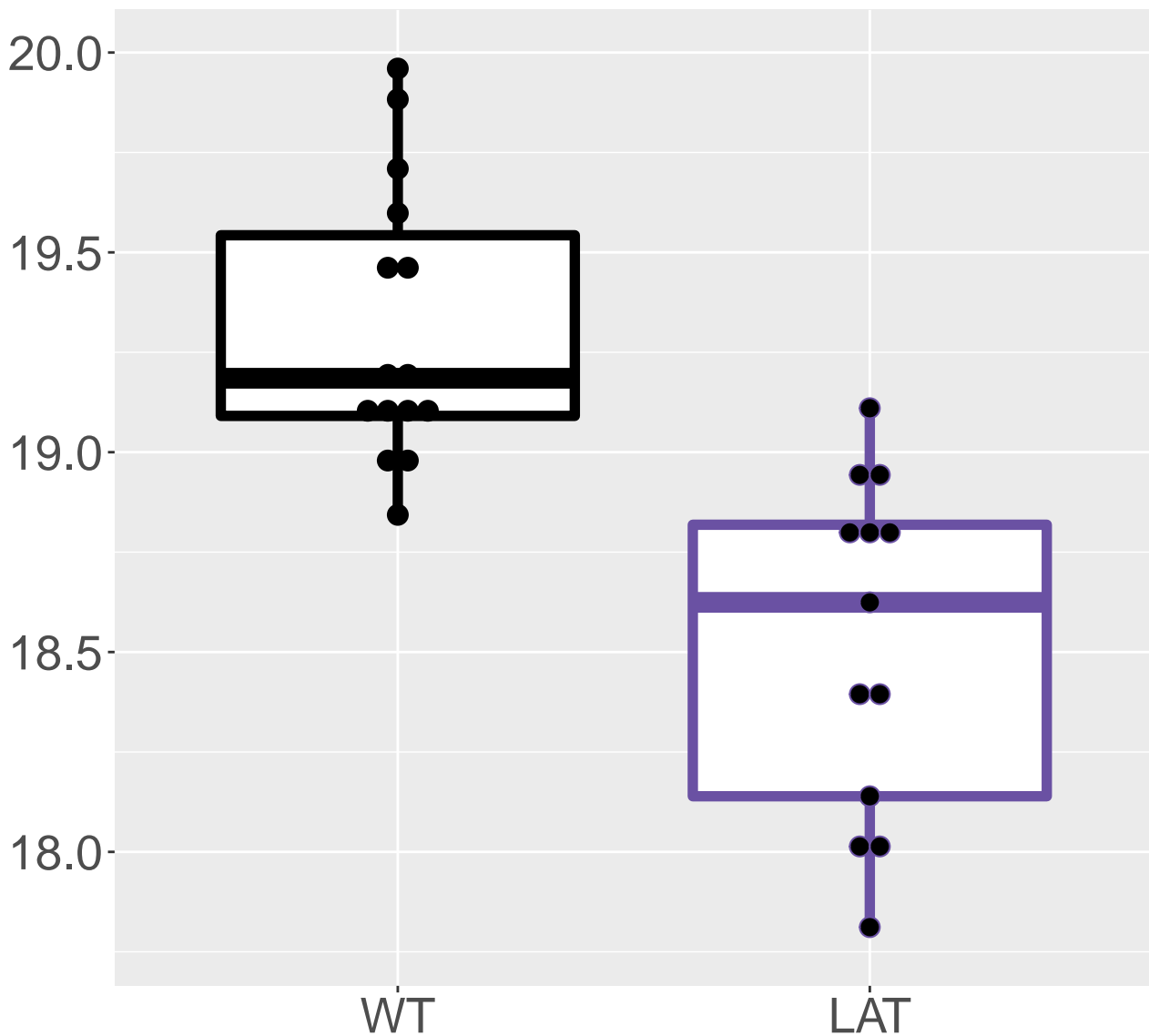
**M548.1489T619.94**

**FDR = 0.00013, FC = -0.92**



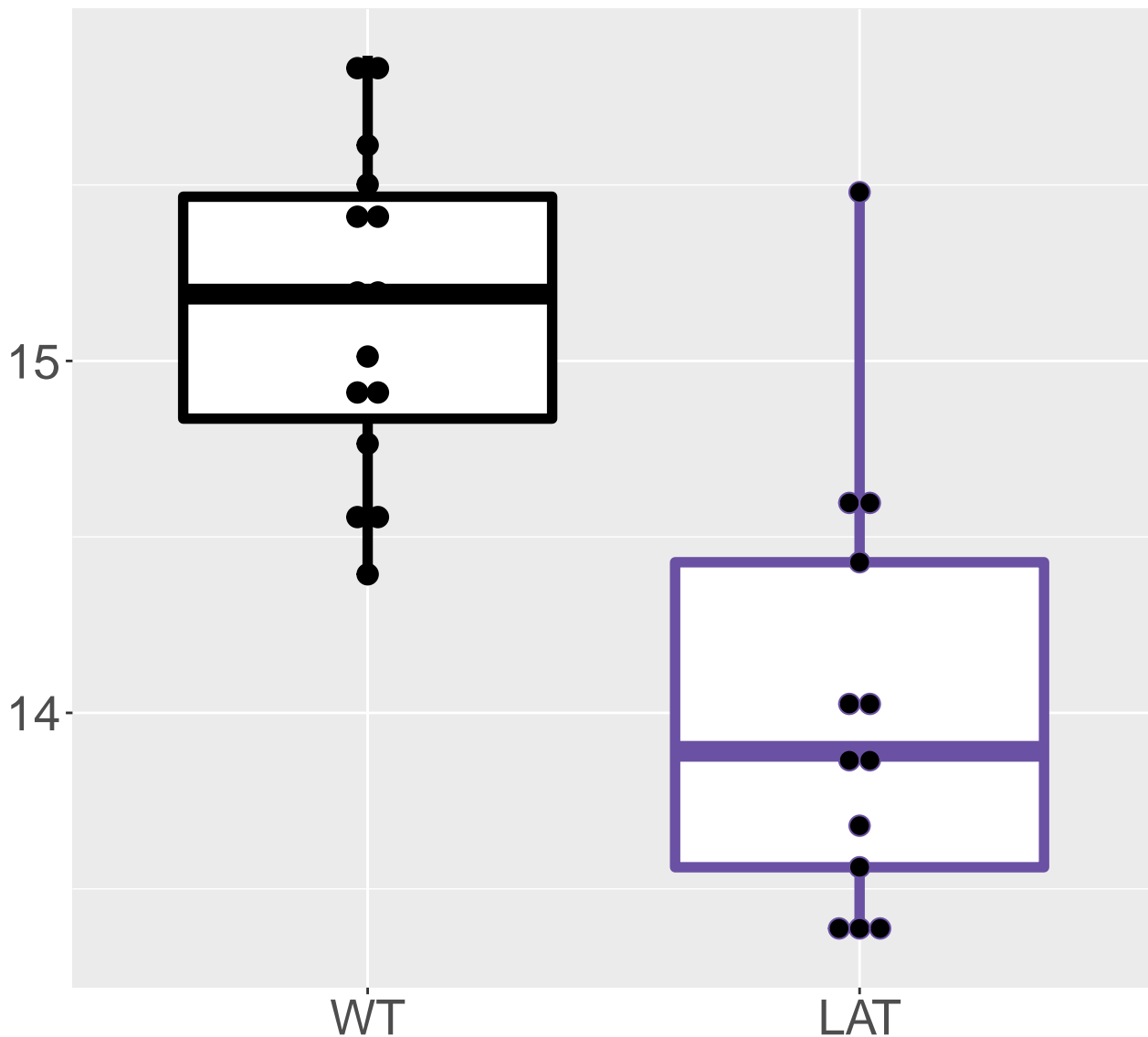
**M201.1359T515.29**

**FDR = 0.00013, FC = -0.79**



**M606.6952T649.86**

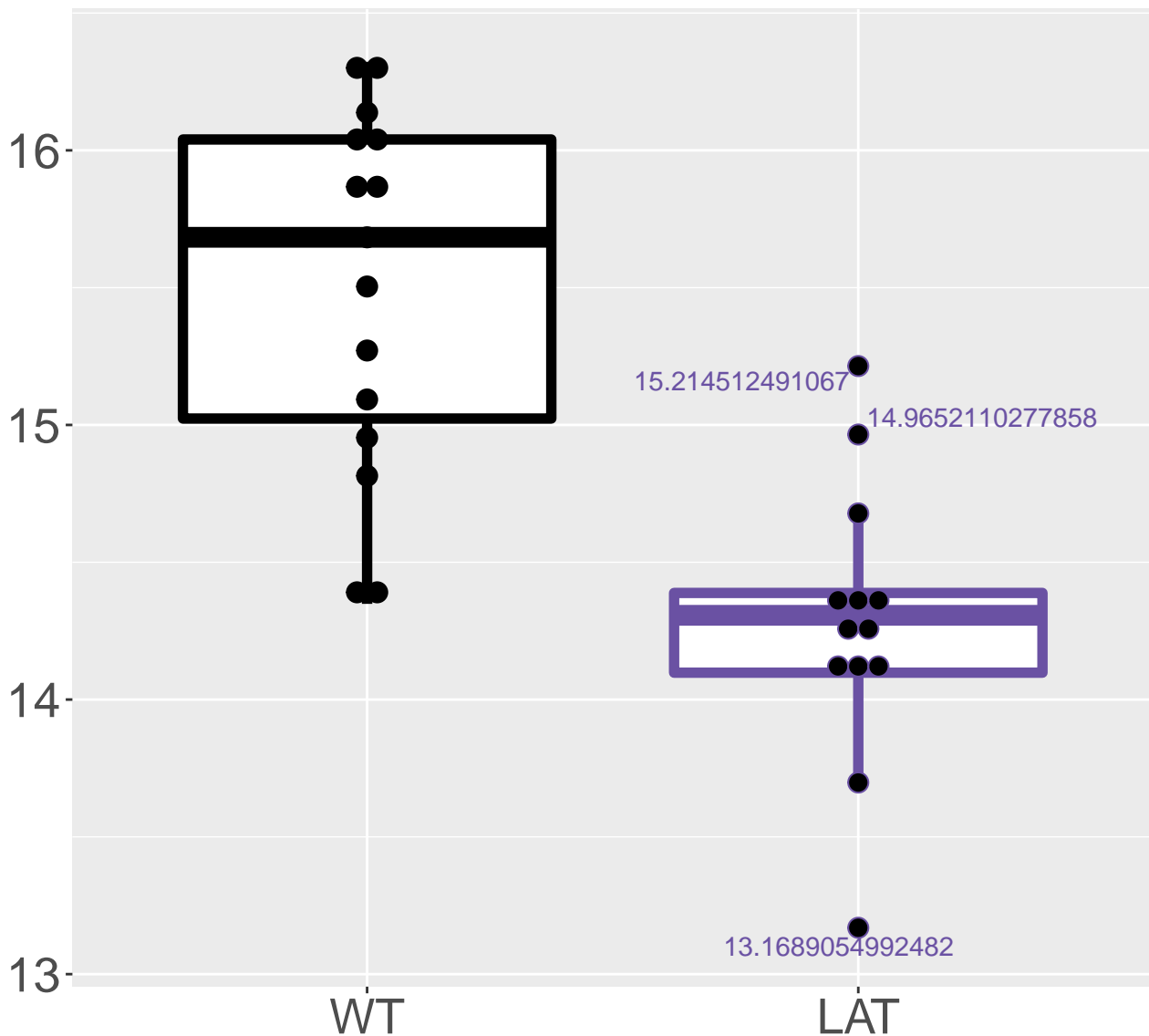
**FDR = 0.00013, FC = -1.1**





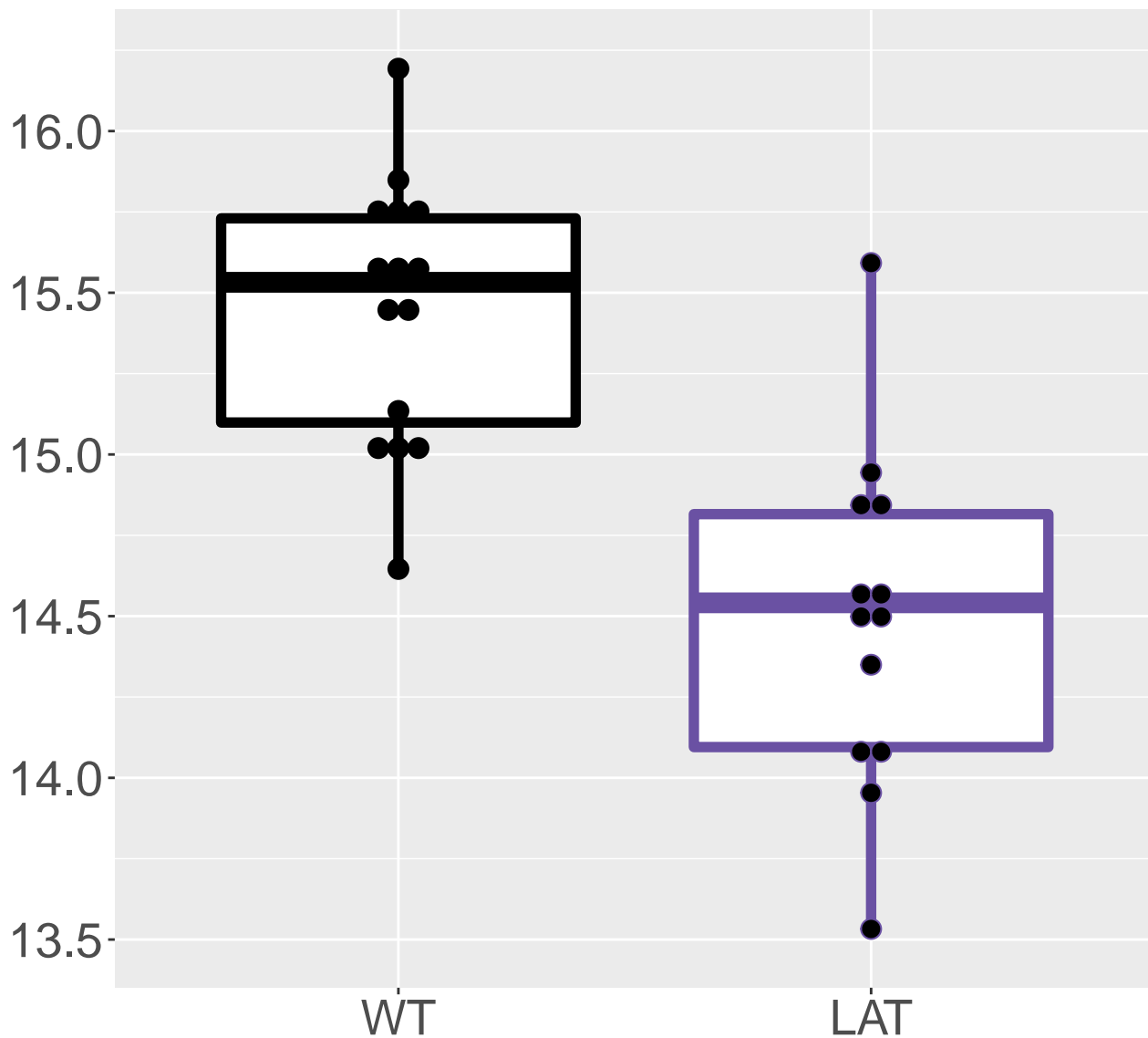
**M436.1336T625.96**

**FDR = 0.00013, FC = -1.2**

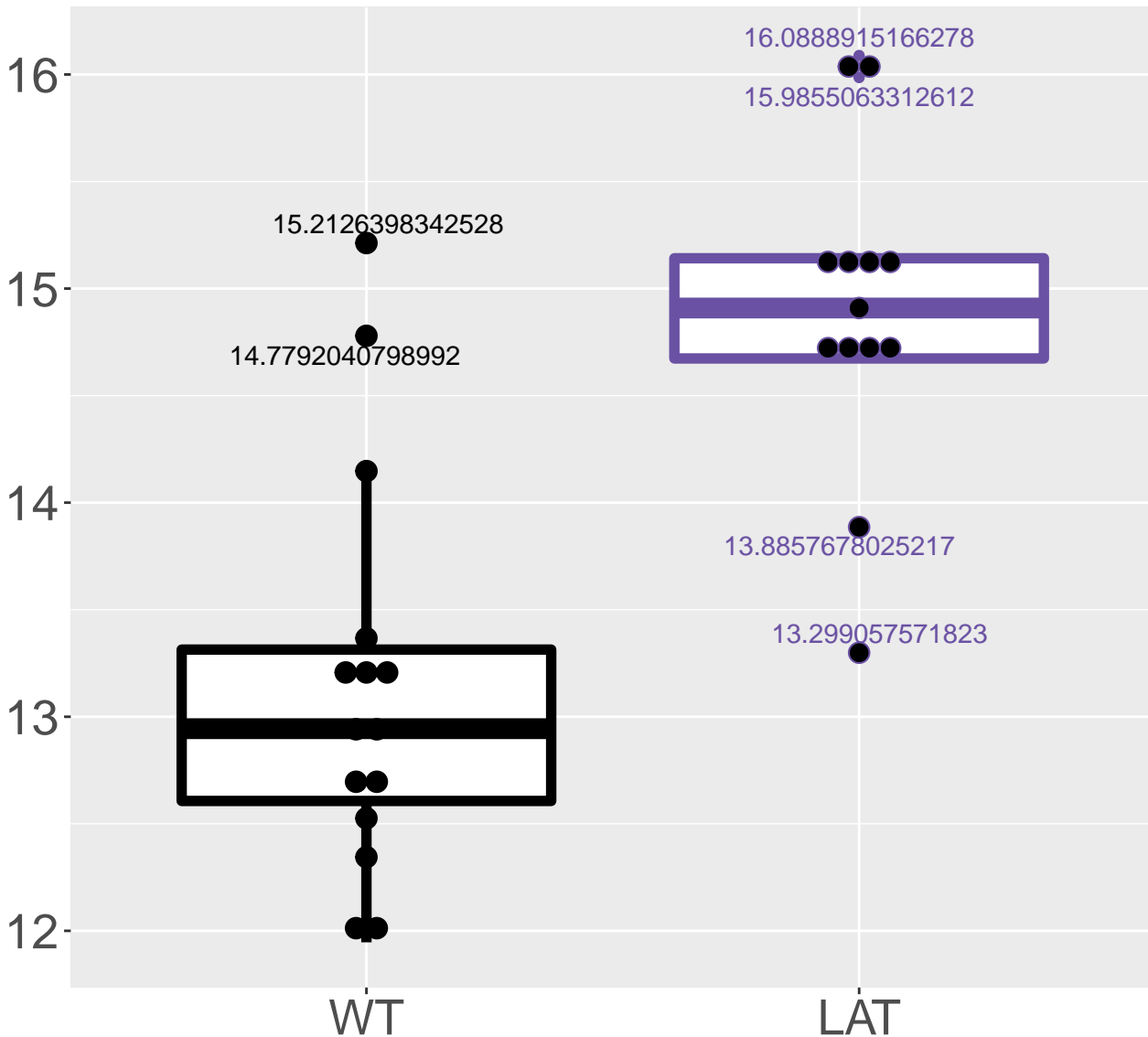


**M549.1507T620\_2**

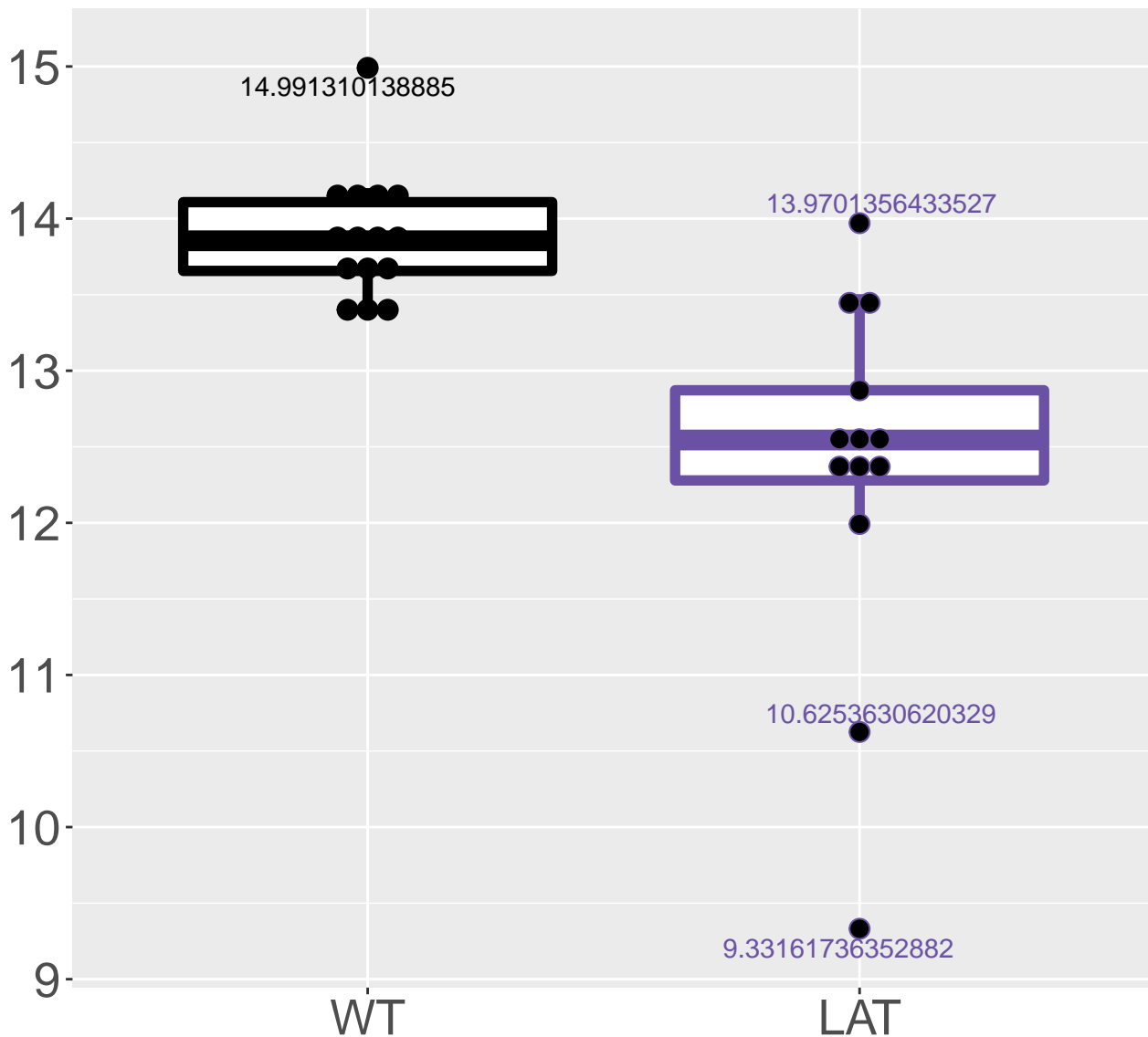
**FDR = 0.00013, FC = -0.96**



**M146.9517T187.07**  
**FDR = 0.00014, FC = 1.7**

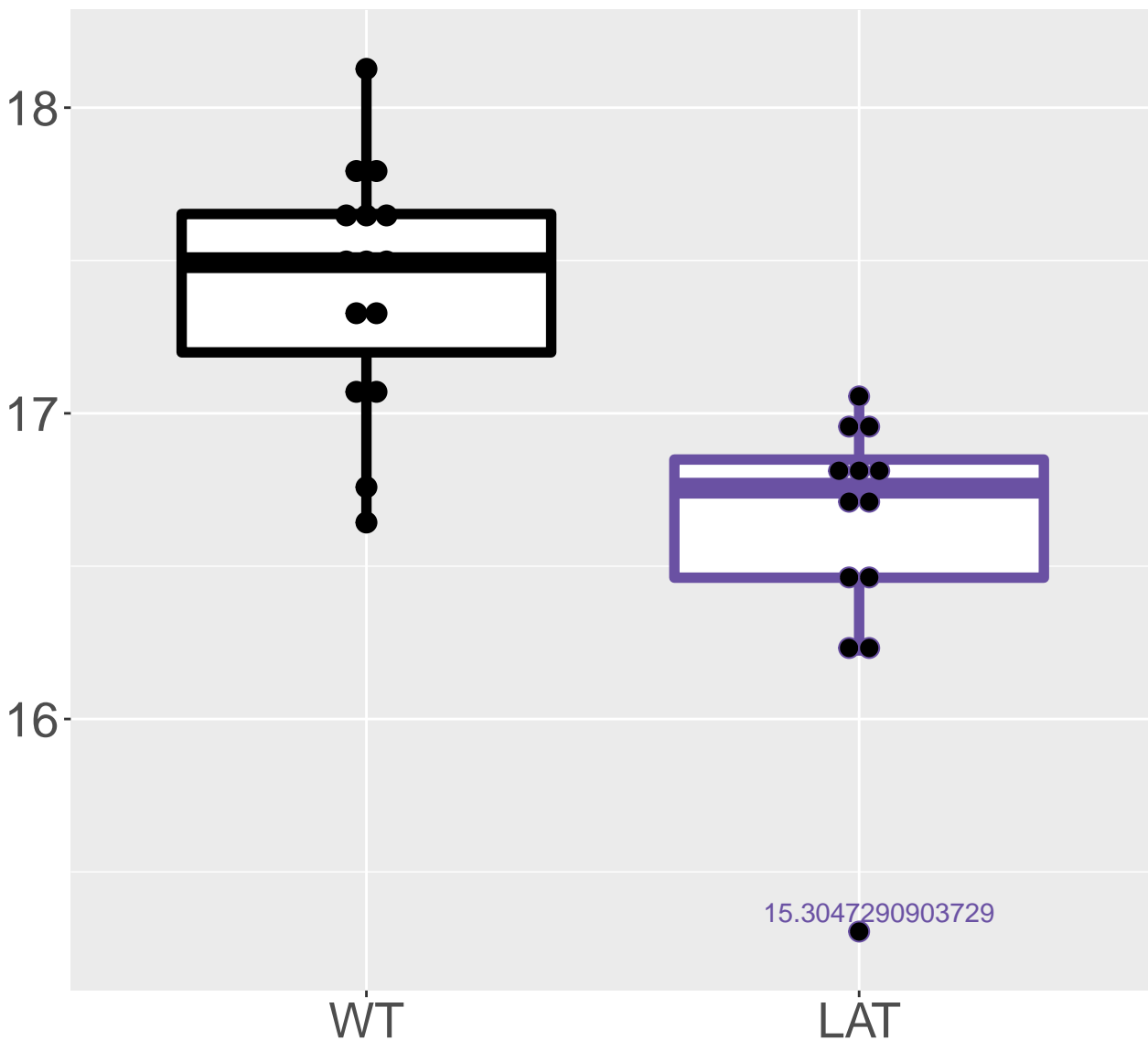


**FDR = 0.00014, FC = -1.5**

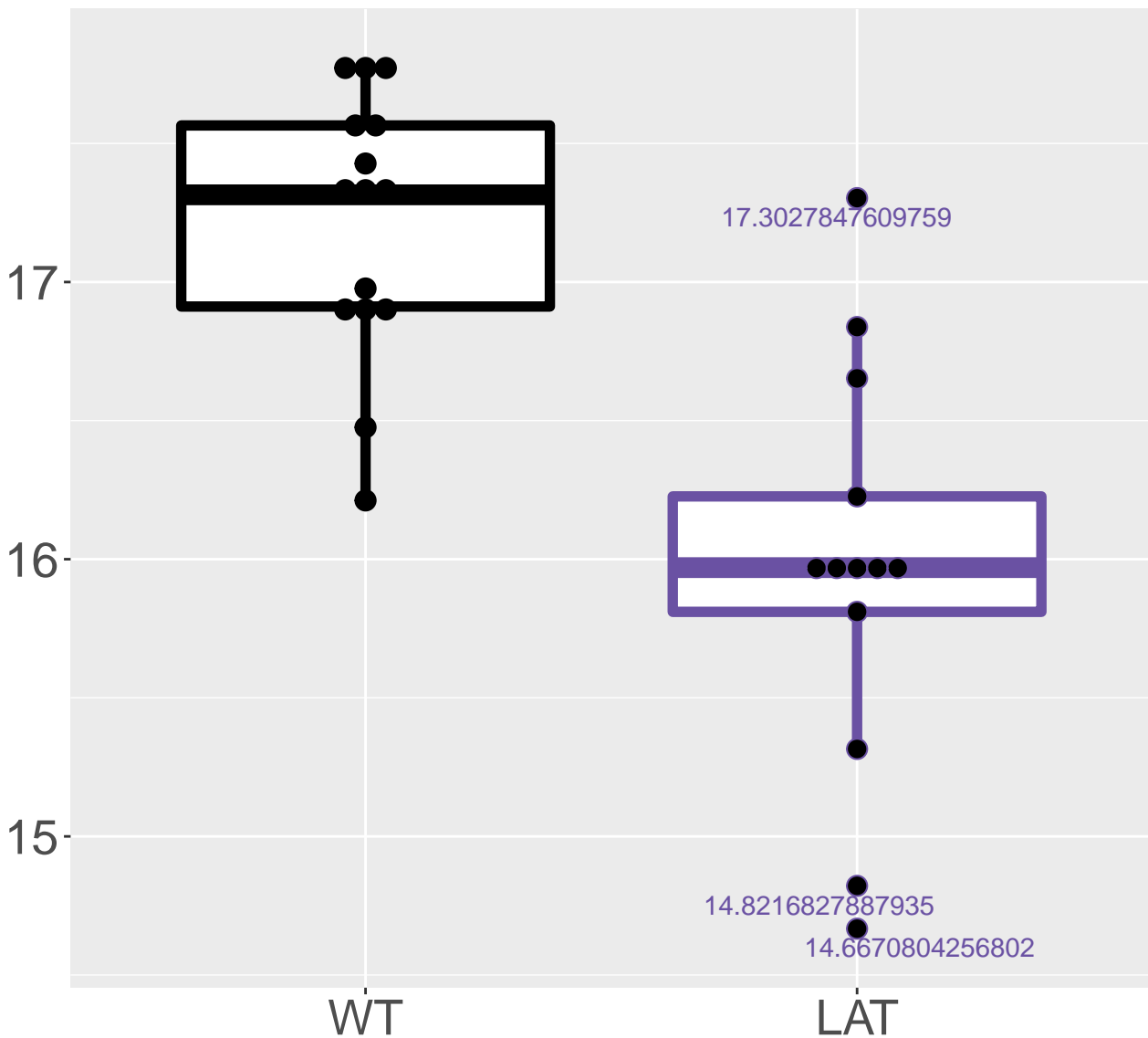


**M581.4578T77.87**

**FDR = 0.00014, FC = -0.85**

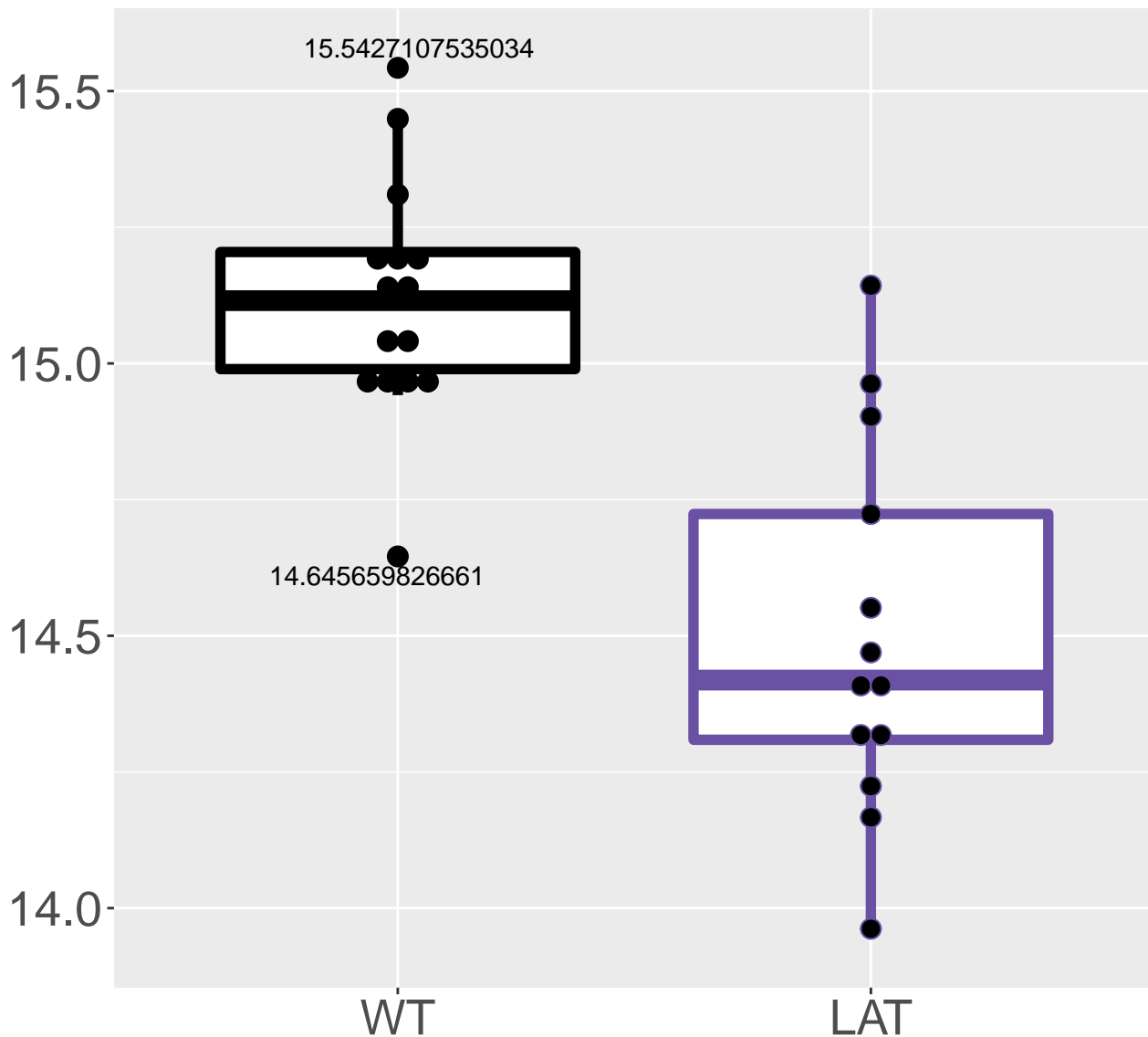


**M365.0968T619.97\_1**  
**FDR = 0.00014, FC = -1.3**



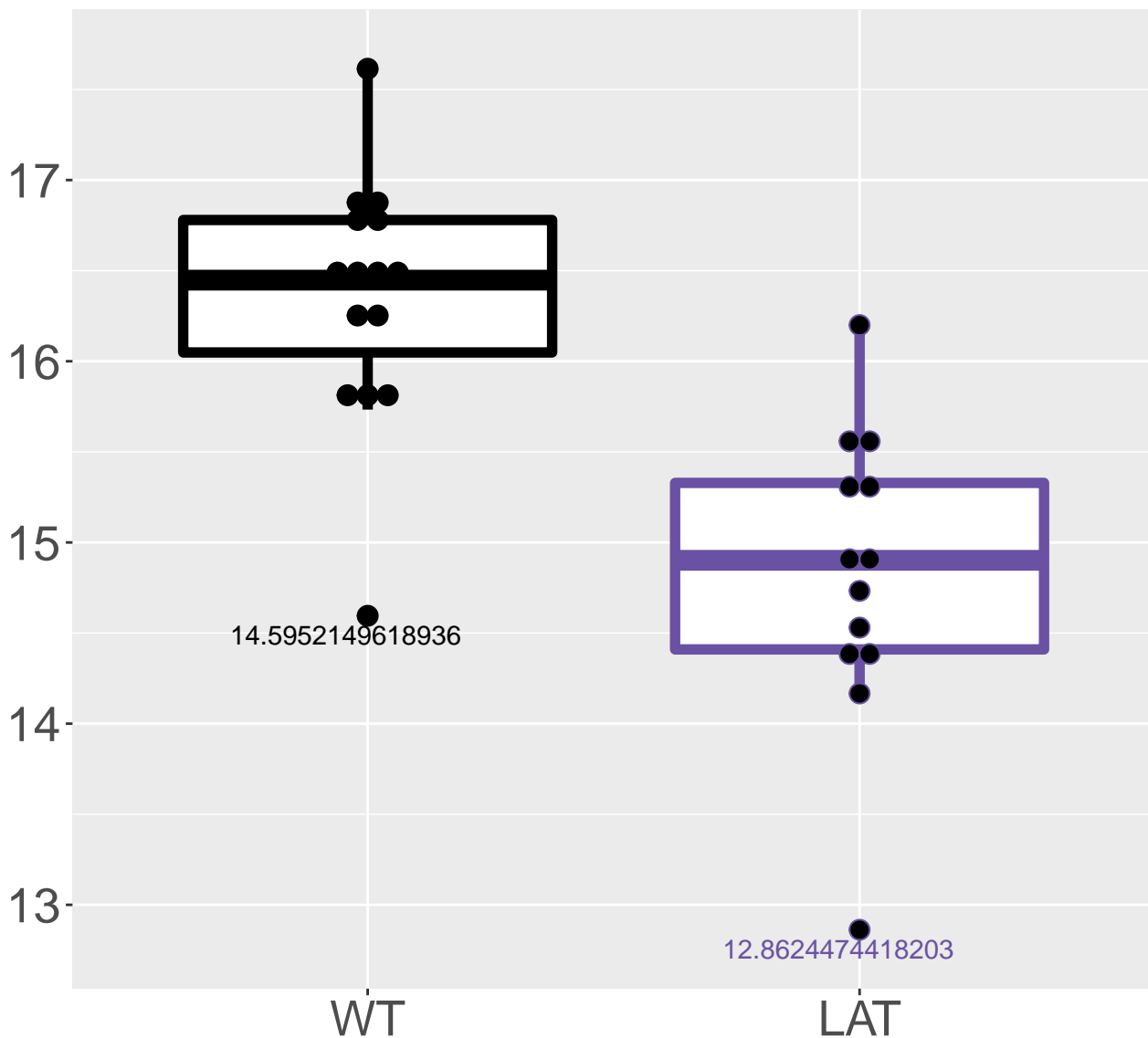
**M867.2504T676.8**

**FDR = 0.00015, FC = -0.61**



**M286.5963T543.04**

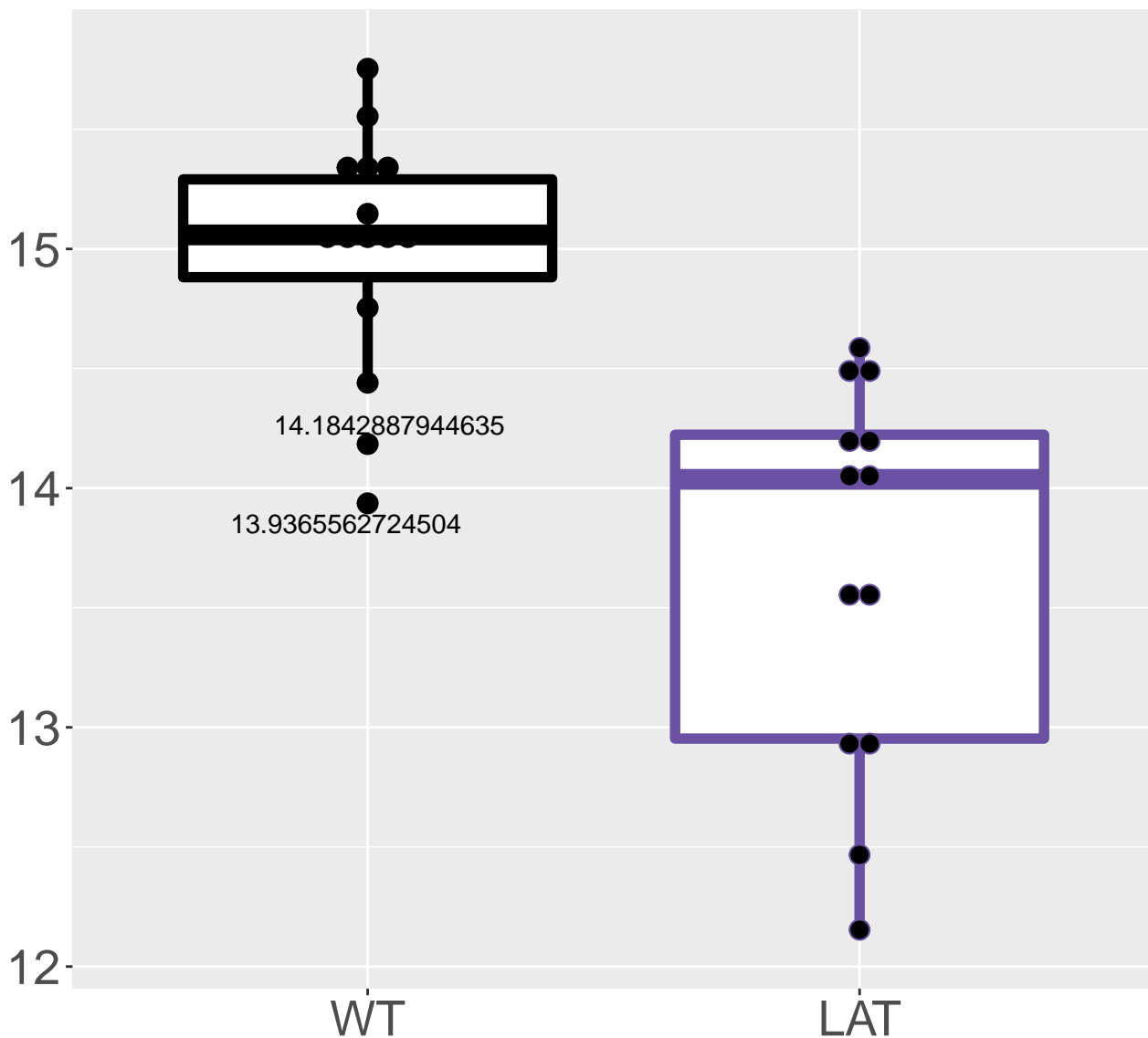
**FDR = 0.00015, FC = -1.5**





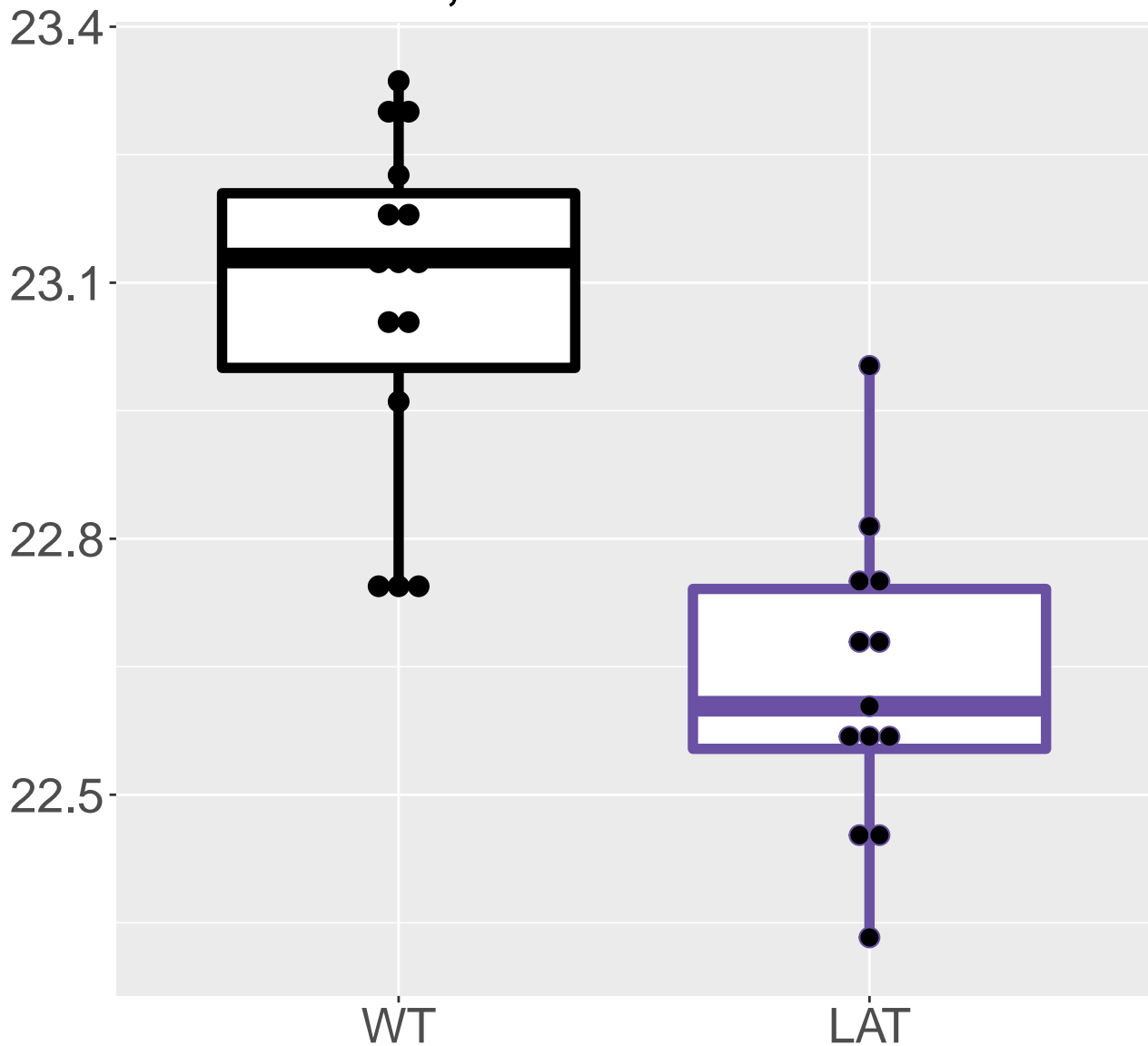
**M681.2104T538.29**

**FDR = 0.00015, FC = -1.3**



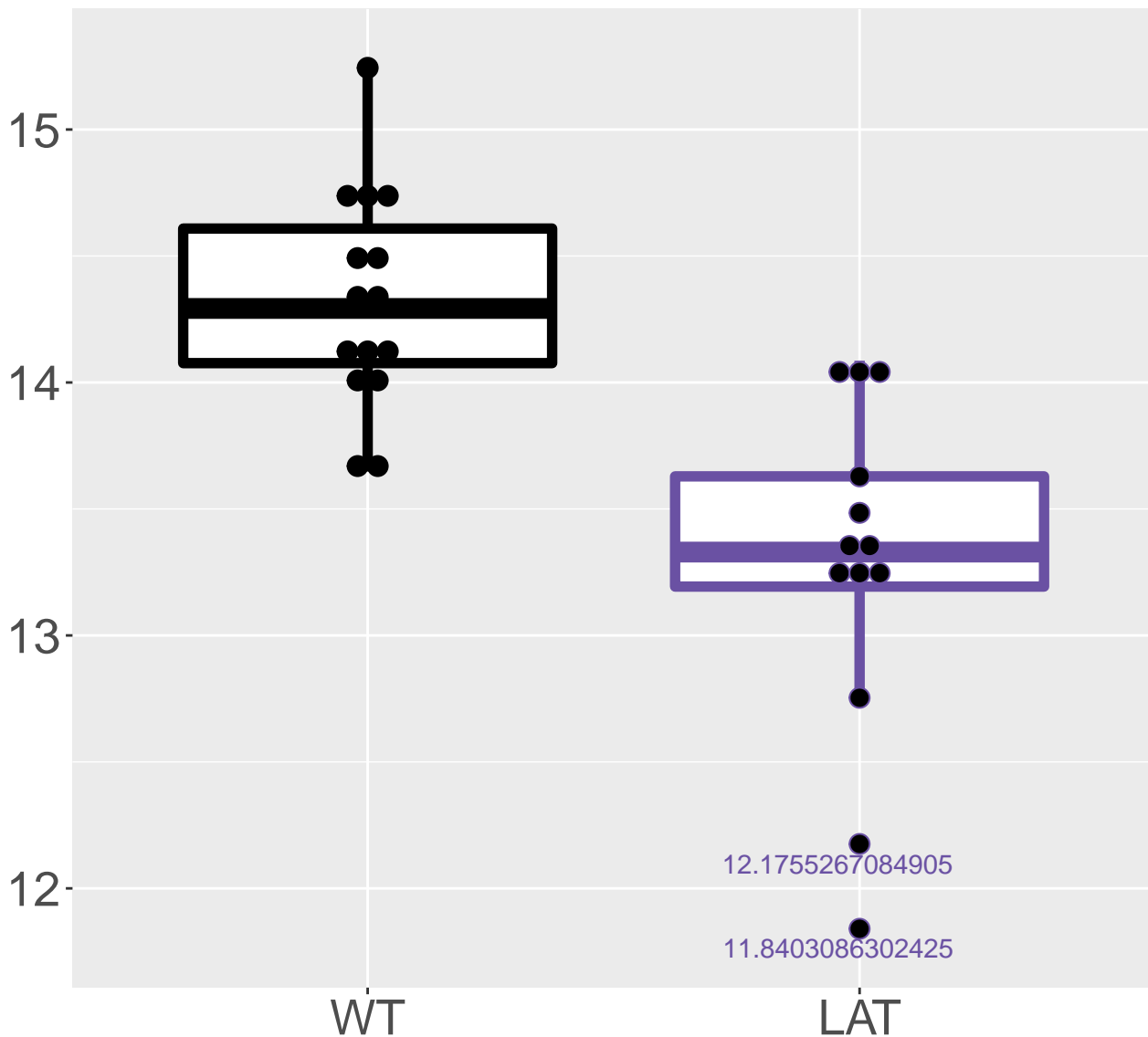
**M277.2177T78.31**

**FDR = 0.00015, FC = -0.45**



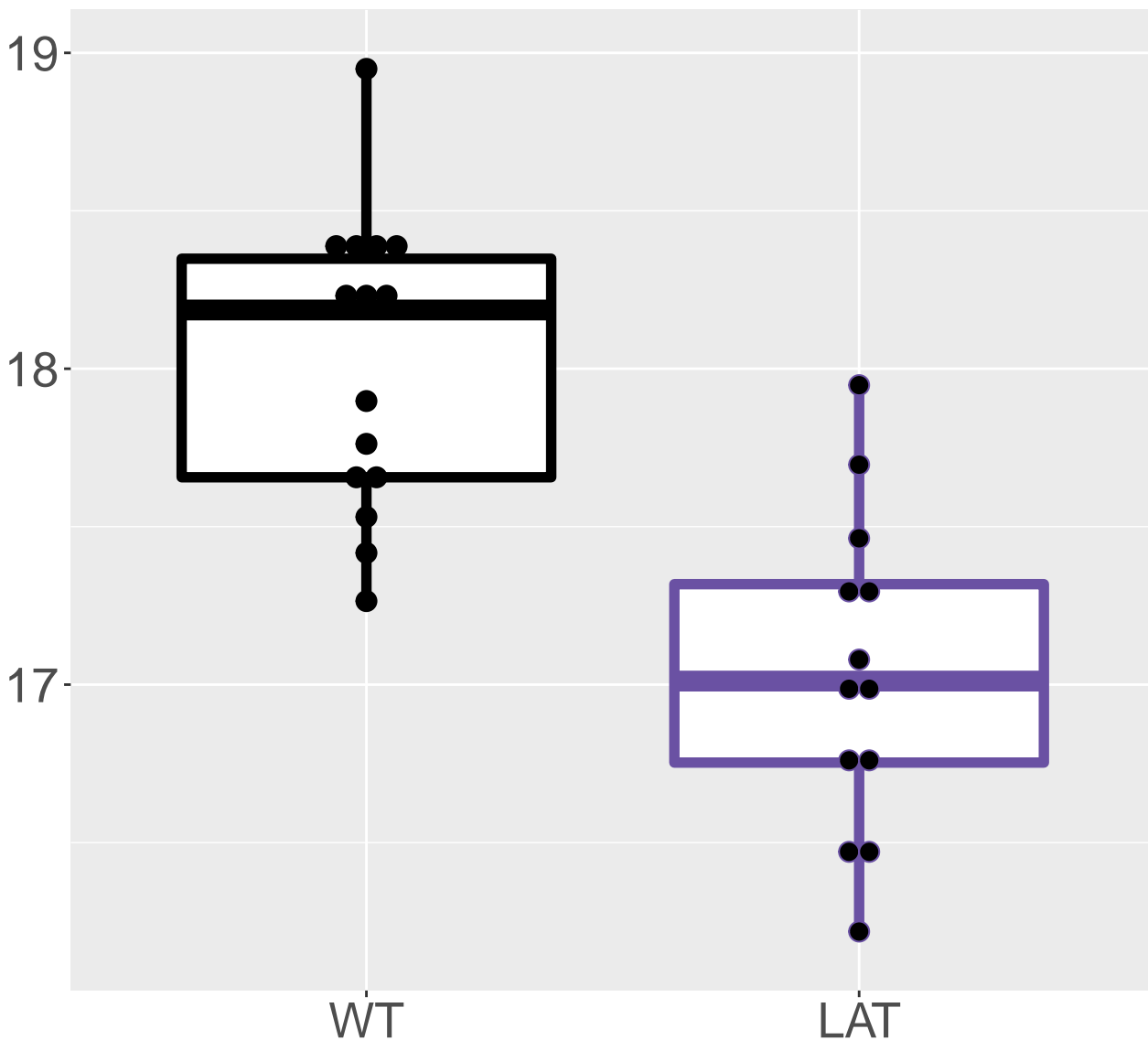
**M200.0487T173.83**

**FDR = 0.00015, FC = -1.1**



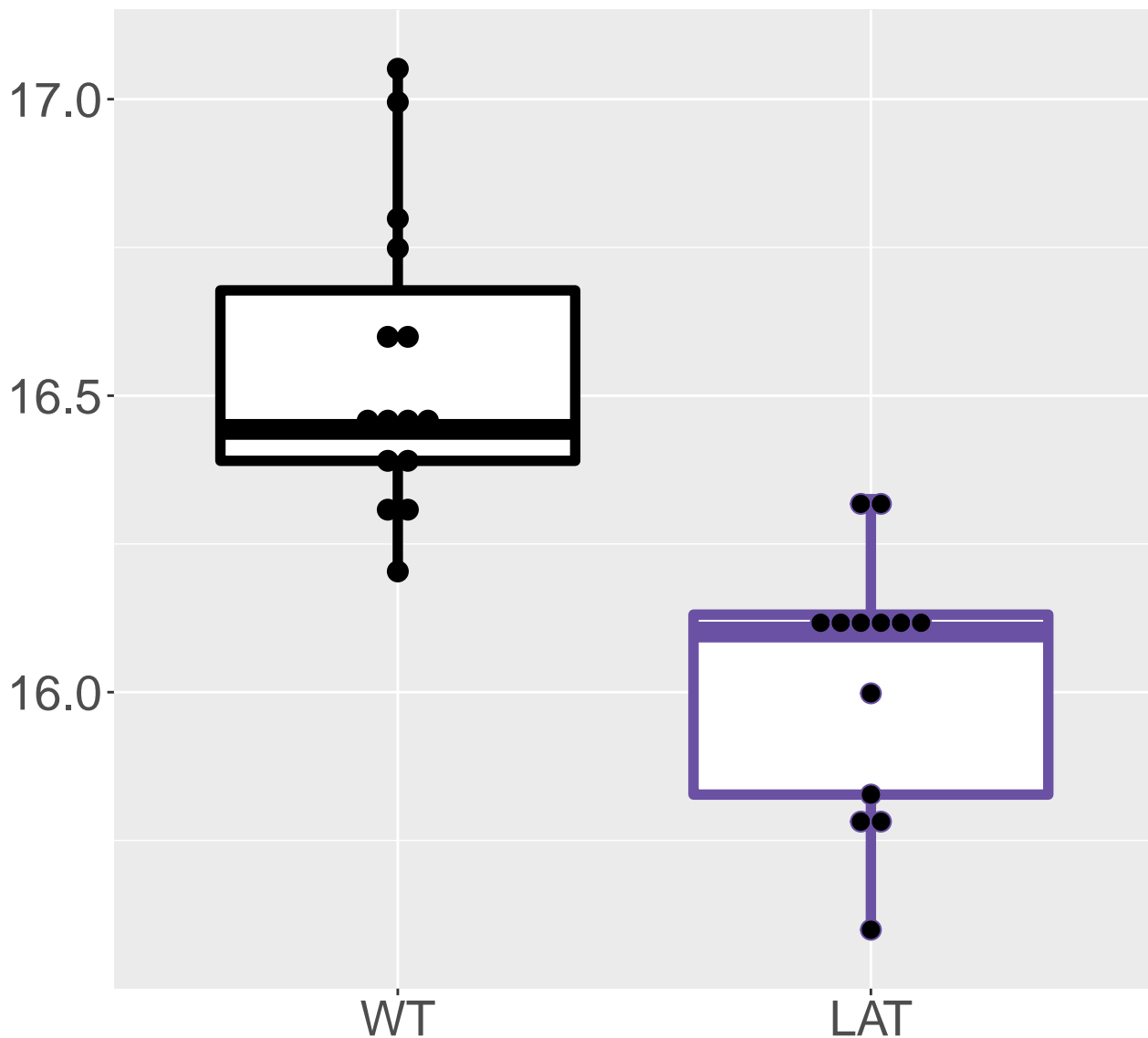
**M889.2677T626**

**FDR = 0.00015, FC = -0.99**



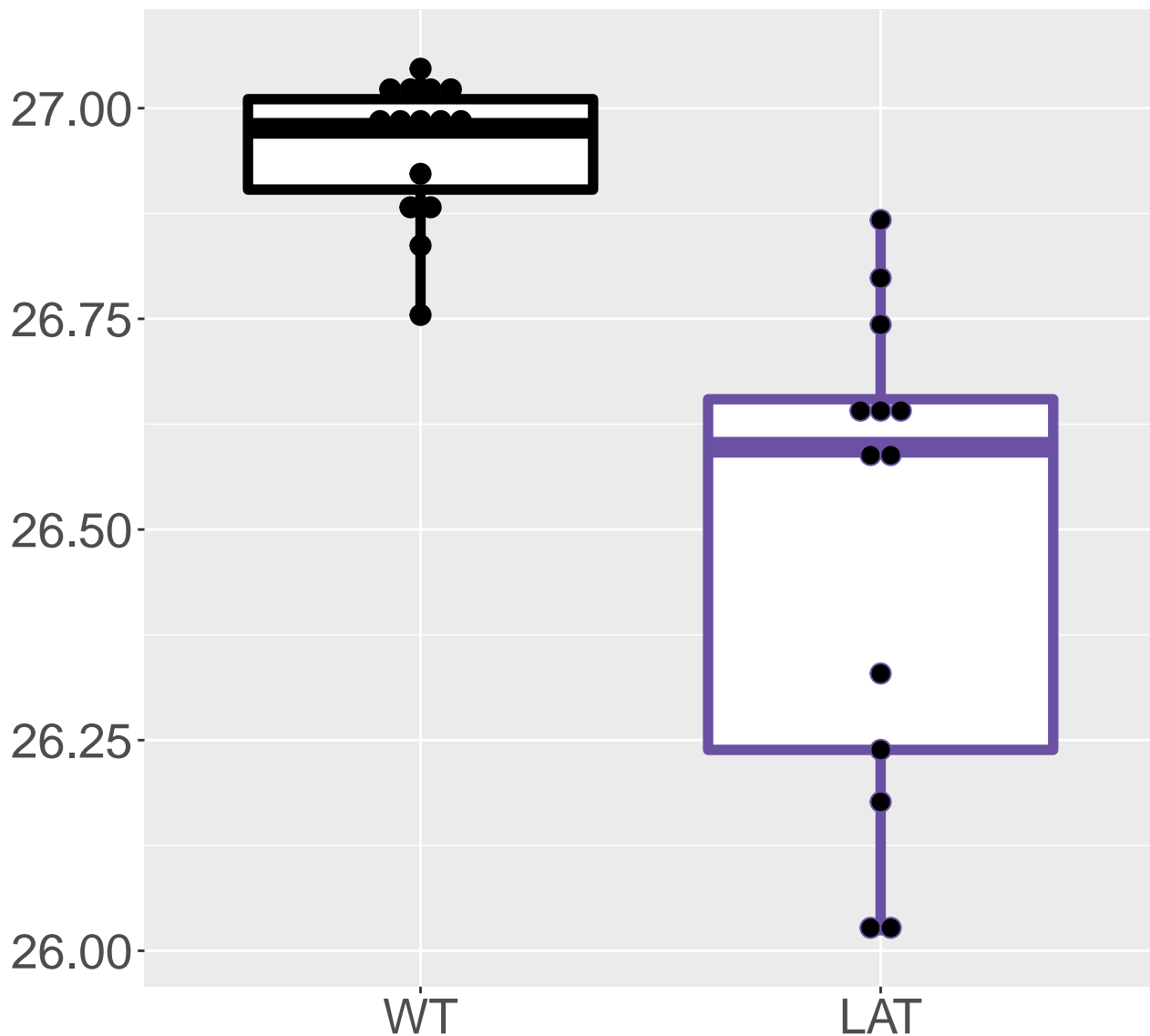
**M162.0561T180.42**

**FDR = 0.00015, FC = -0.52**

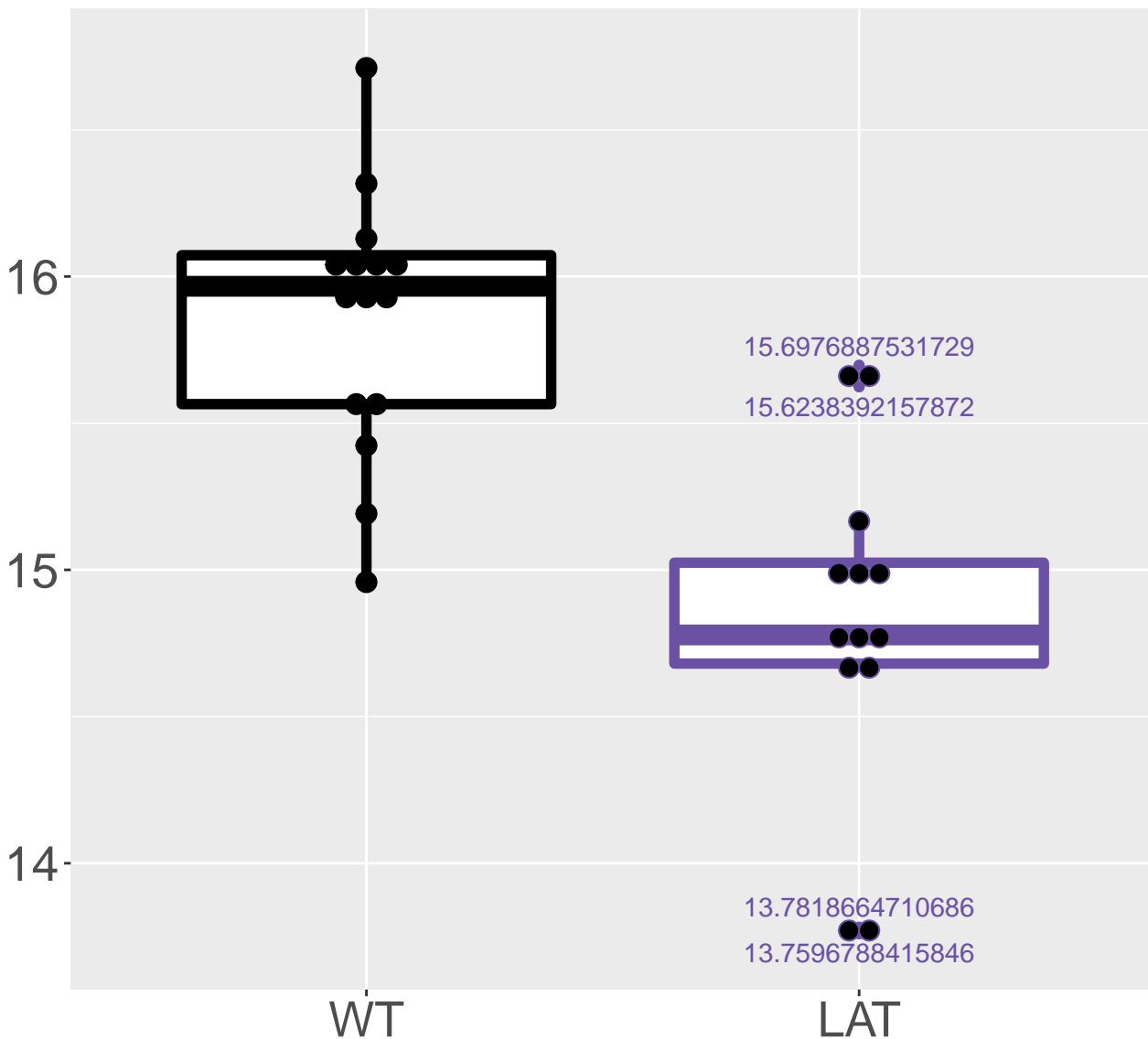


# Xanthine

FDR = 0.00015, FC = -0.47

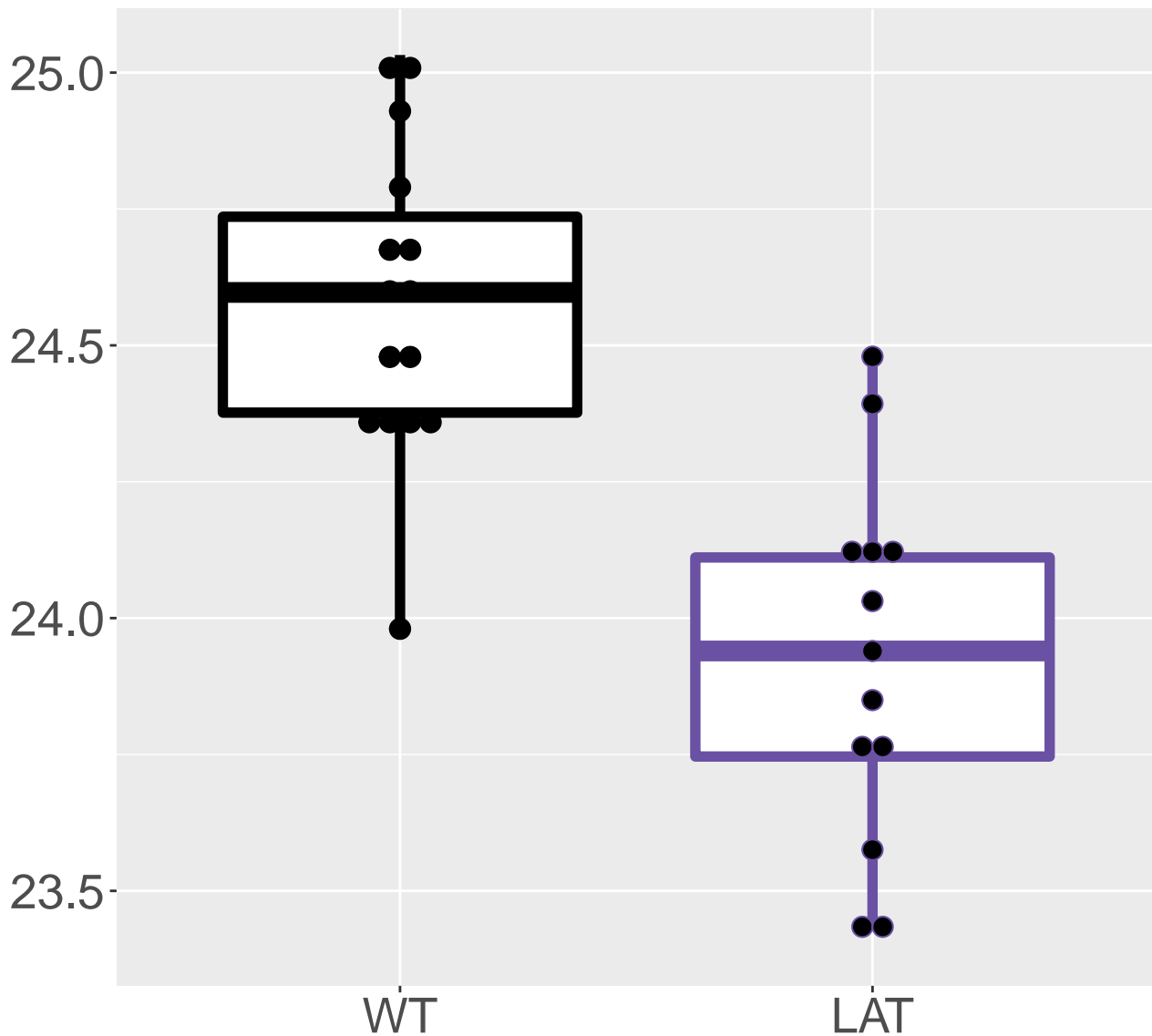


**M699.214T509.57**  
**FDR = 0.00015, FC = -1**



**M284.0991T478.88**

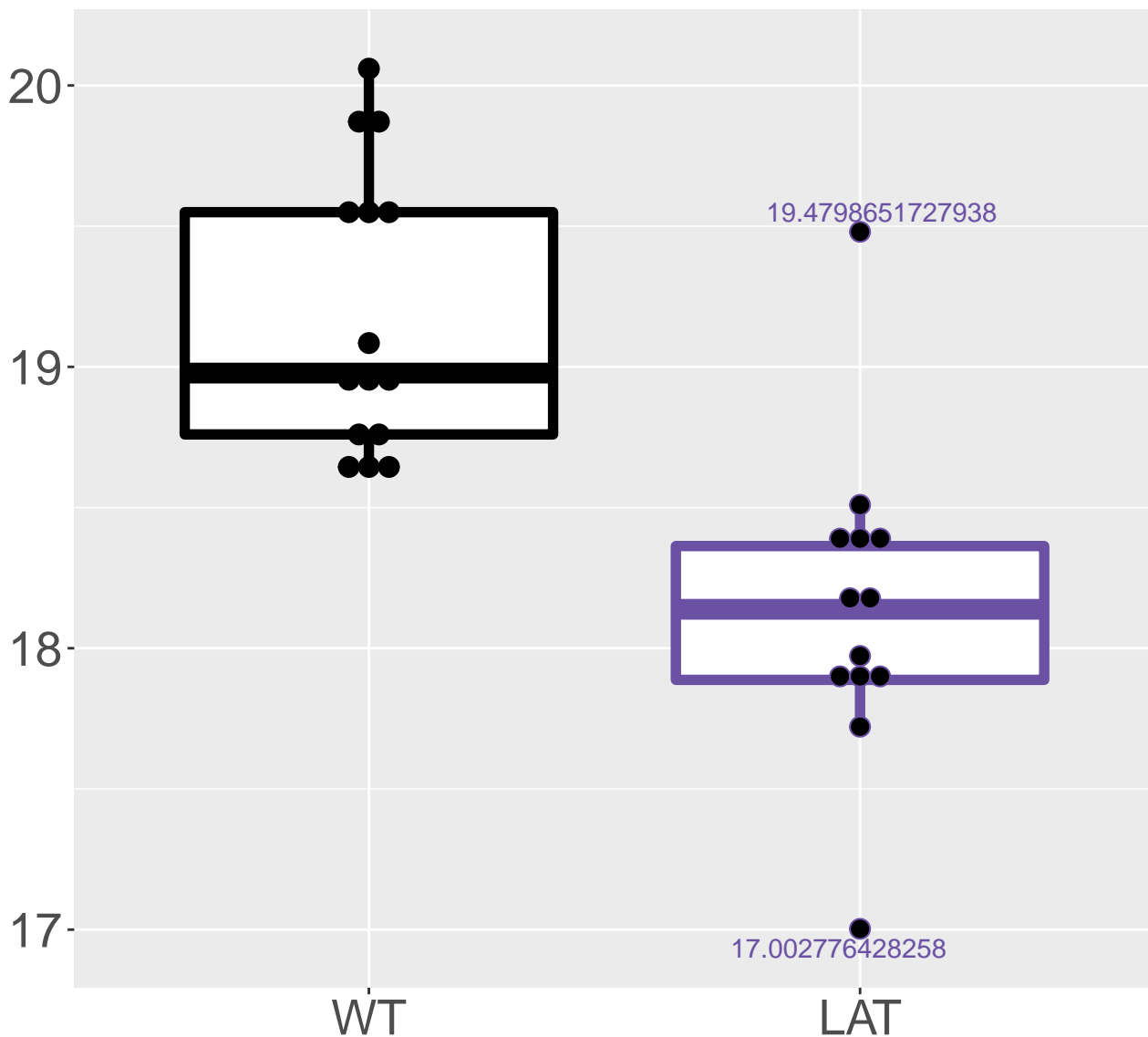
**FDR = 0.00015, FC = -0.65**





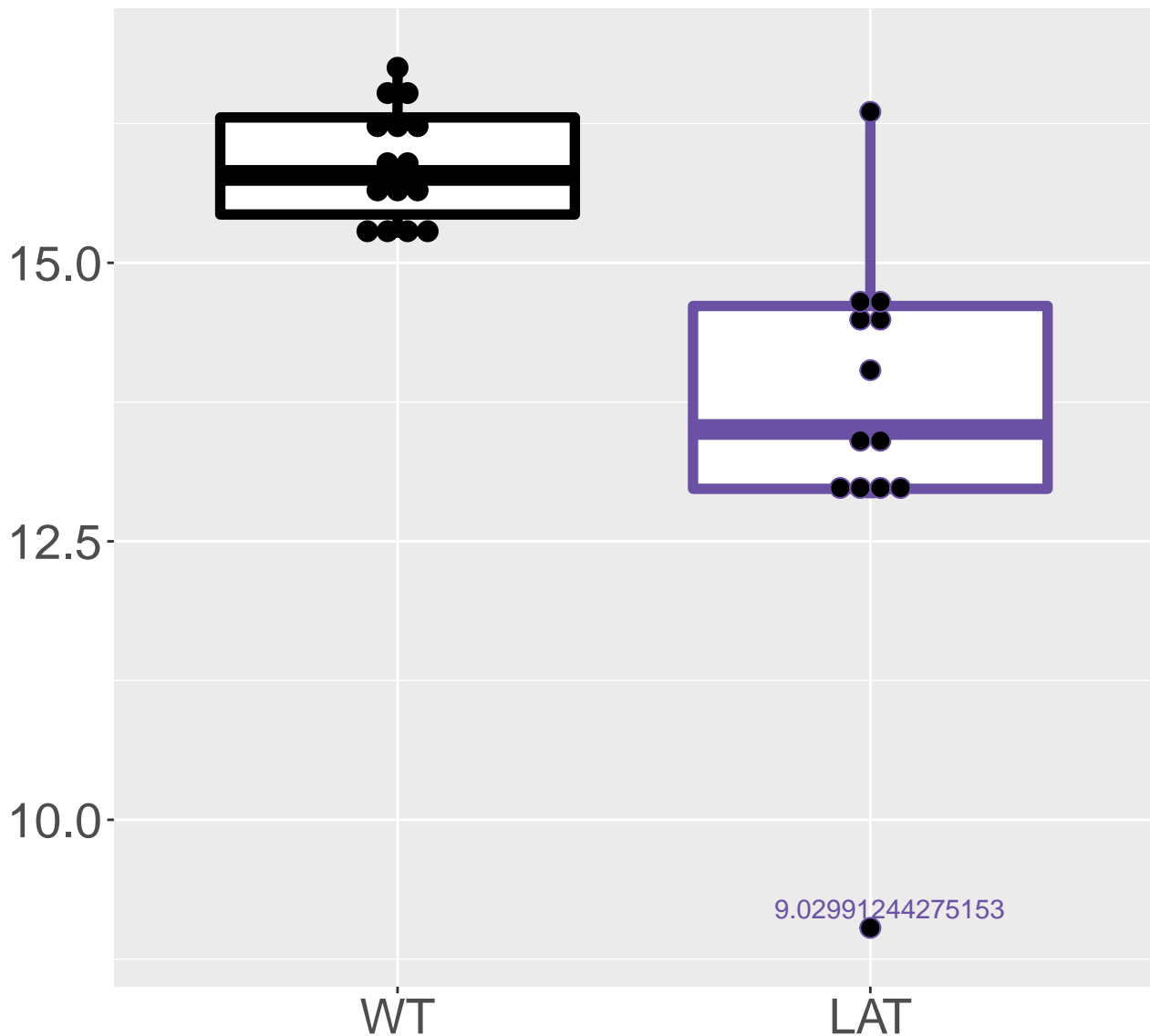
**M262.1299T173.45**

**FDR = 0.00016, FC = -1**



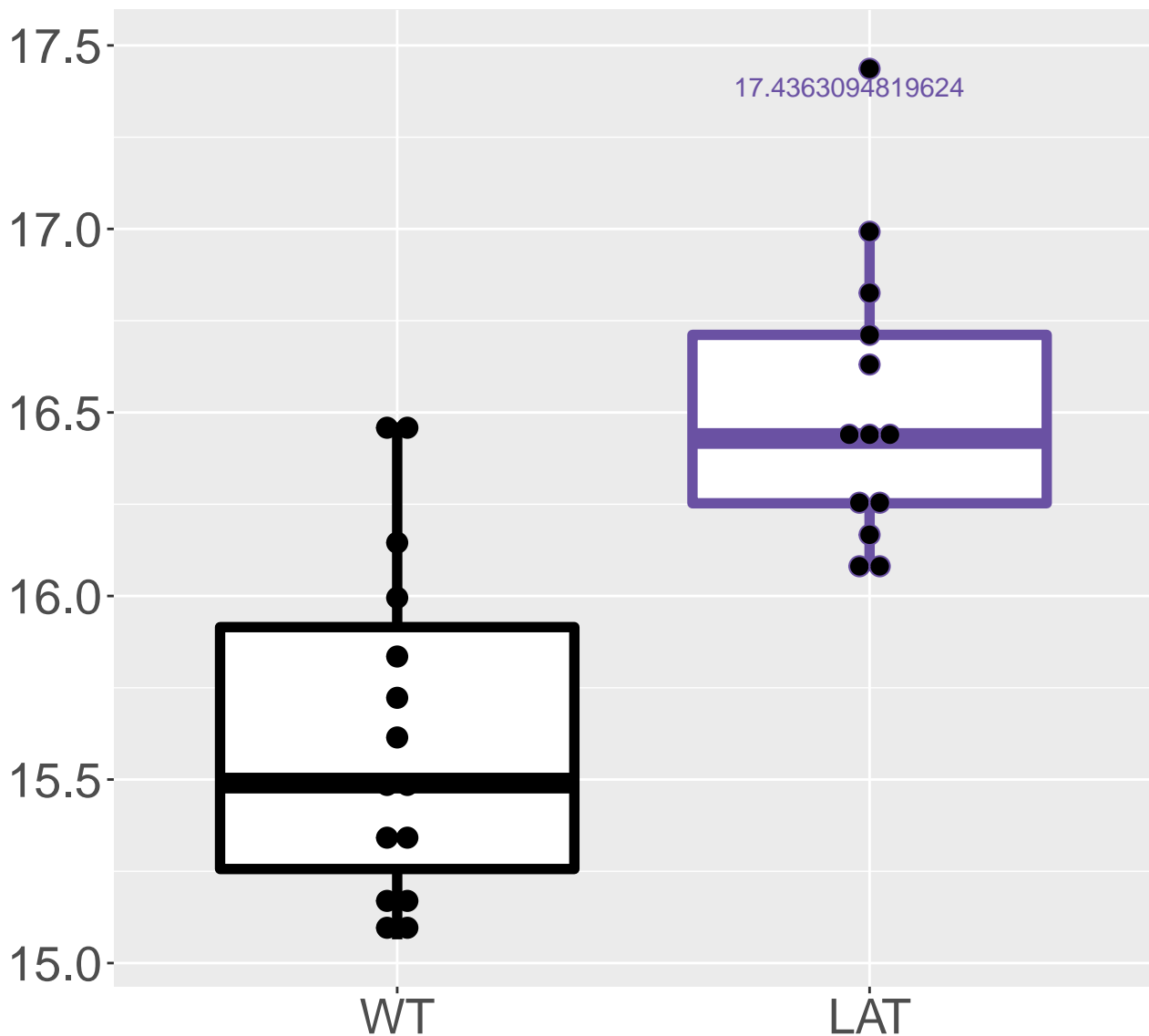
**M682.2415T515.76**

**FDR = 0.00016, FC = -2.3**



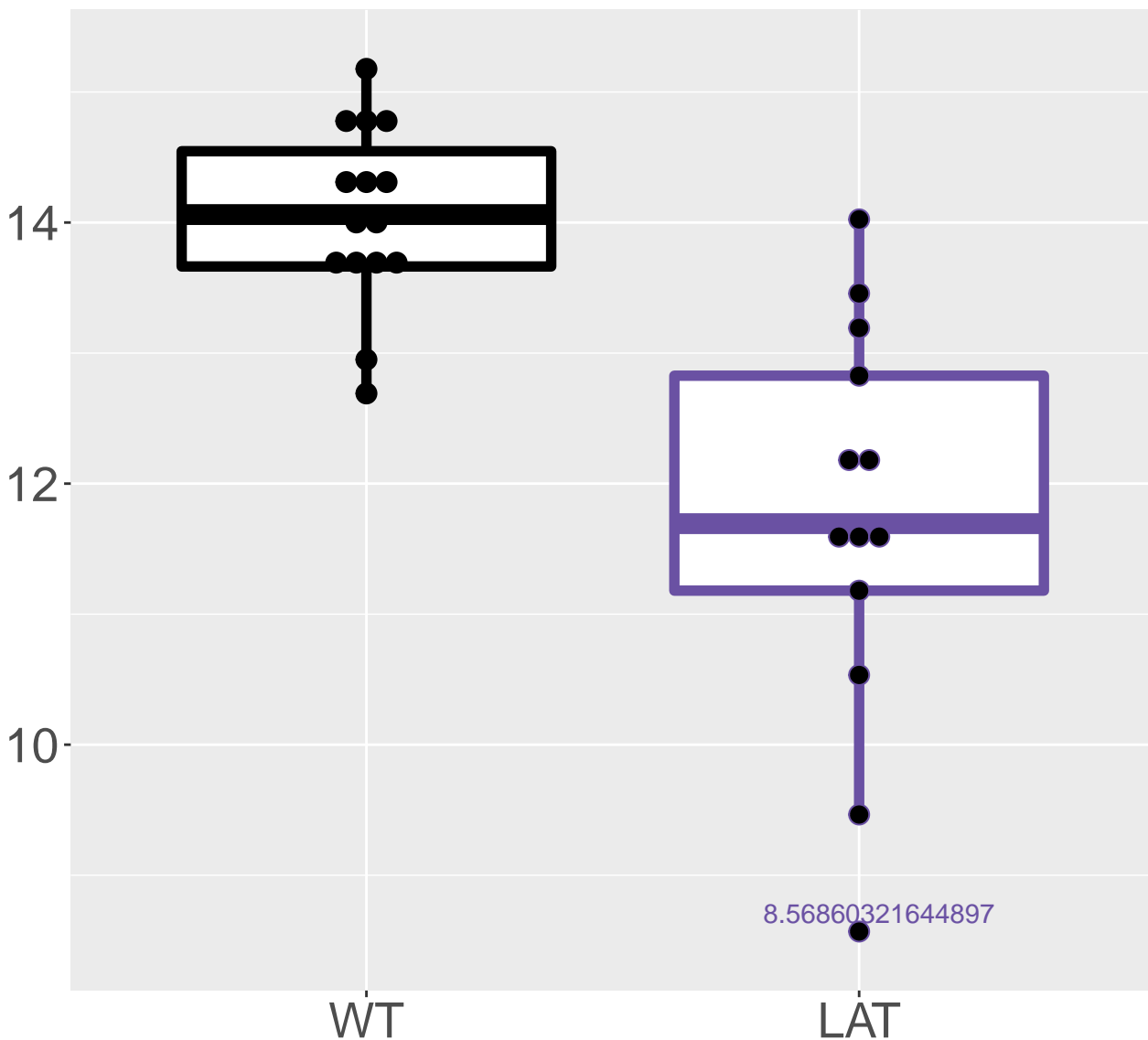
**M135.0507T194.37**

**FDR = 0.00016, FC = 0.89**



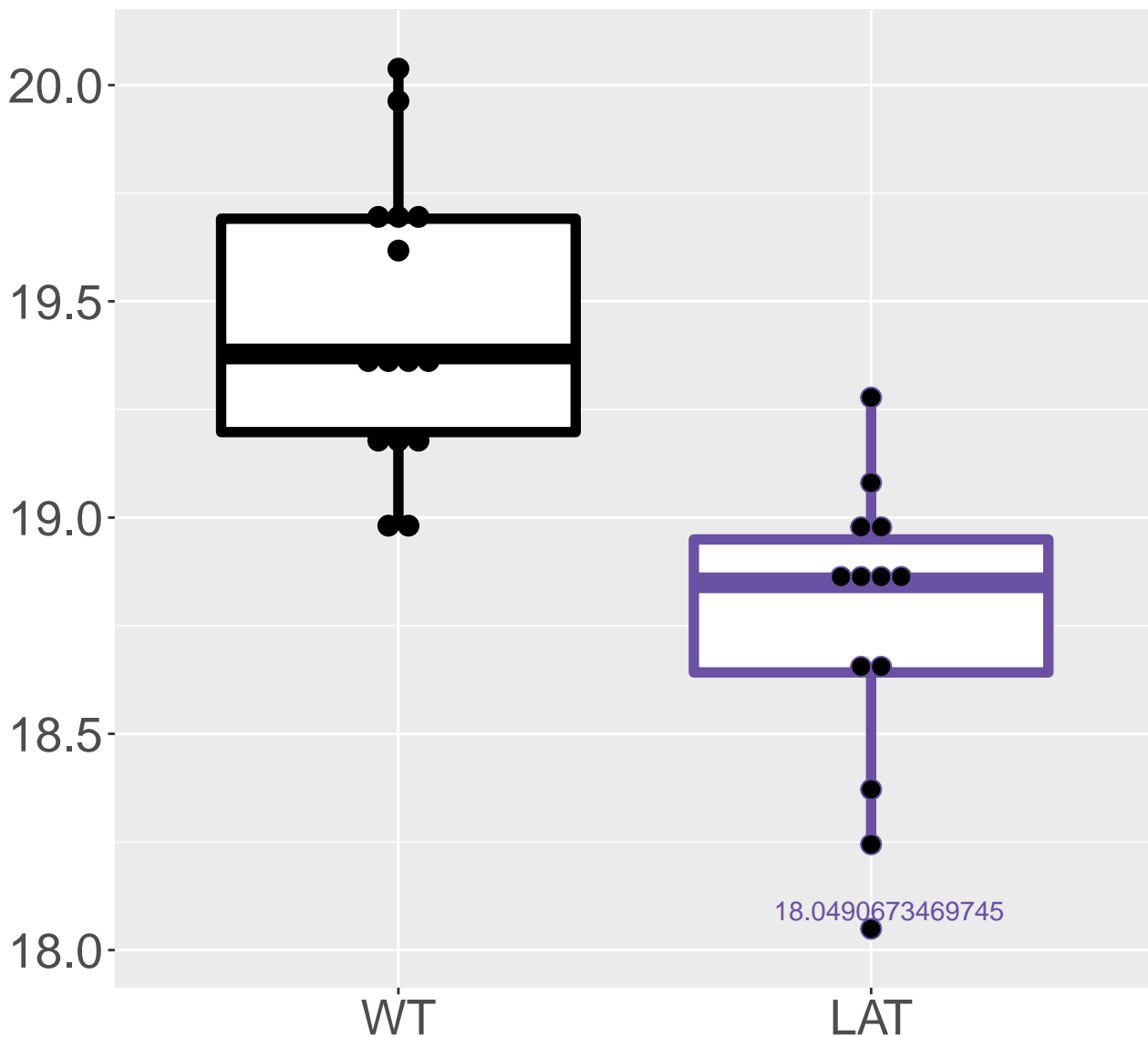
**M592.1833T514.56**

**FDR = 0.00017, FC = -2.3**



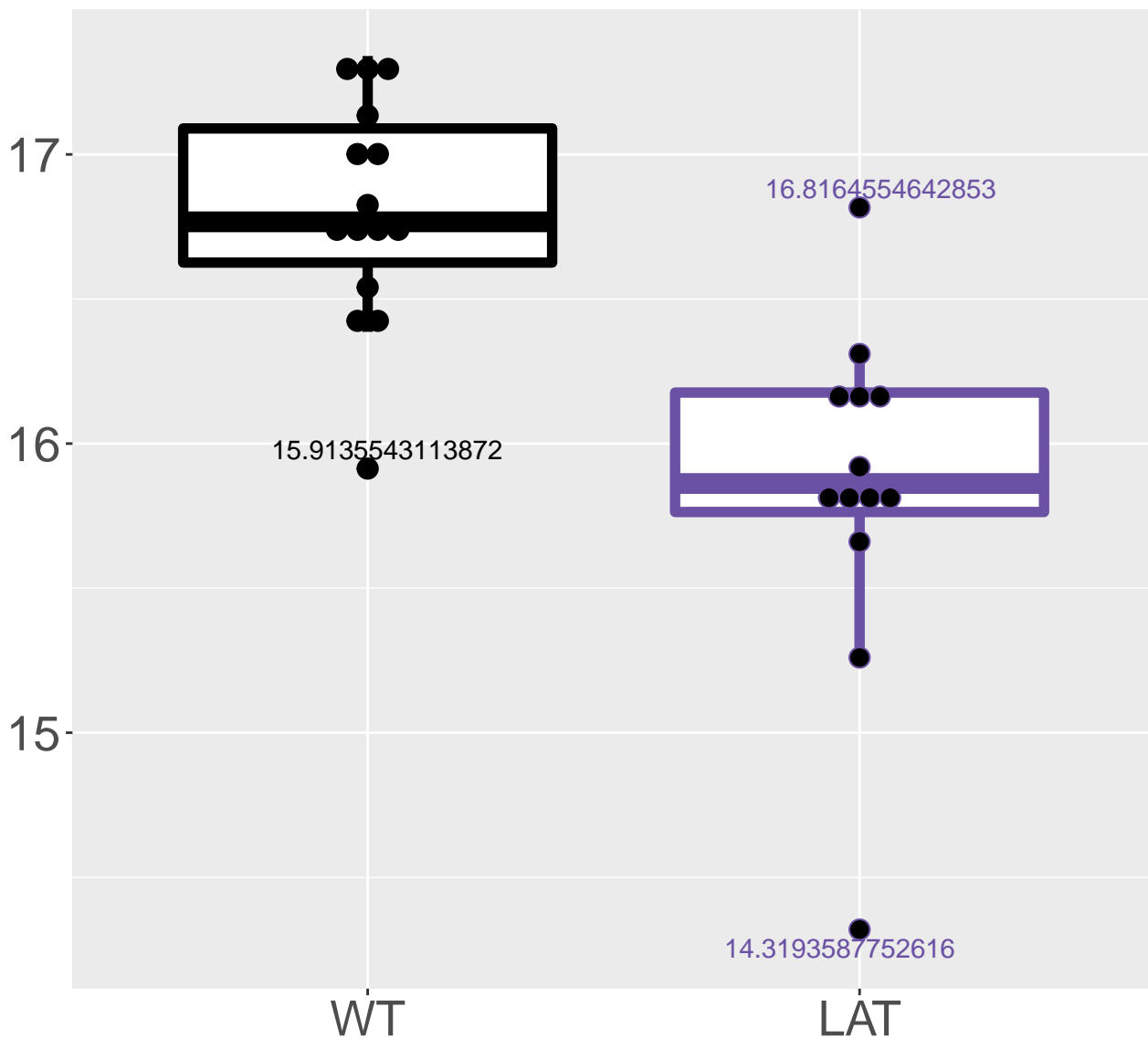
**M255.0892T157.55**

**FDR = 0.00017, FC = -0.7**



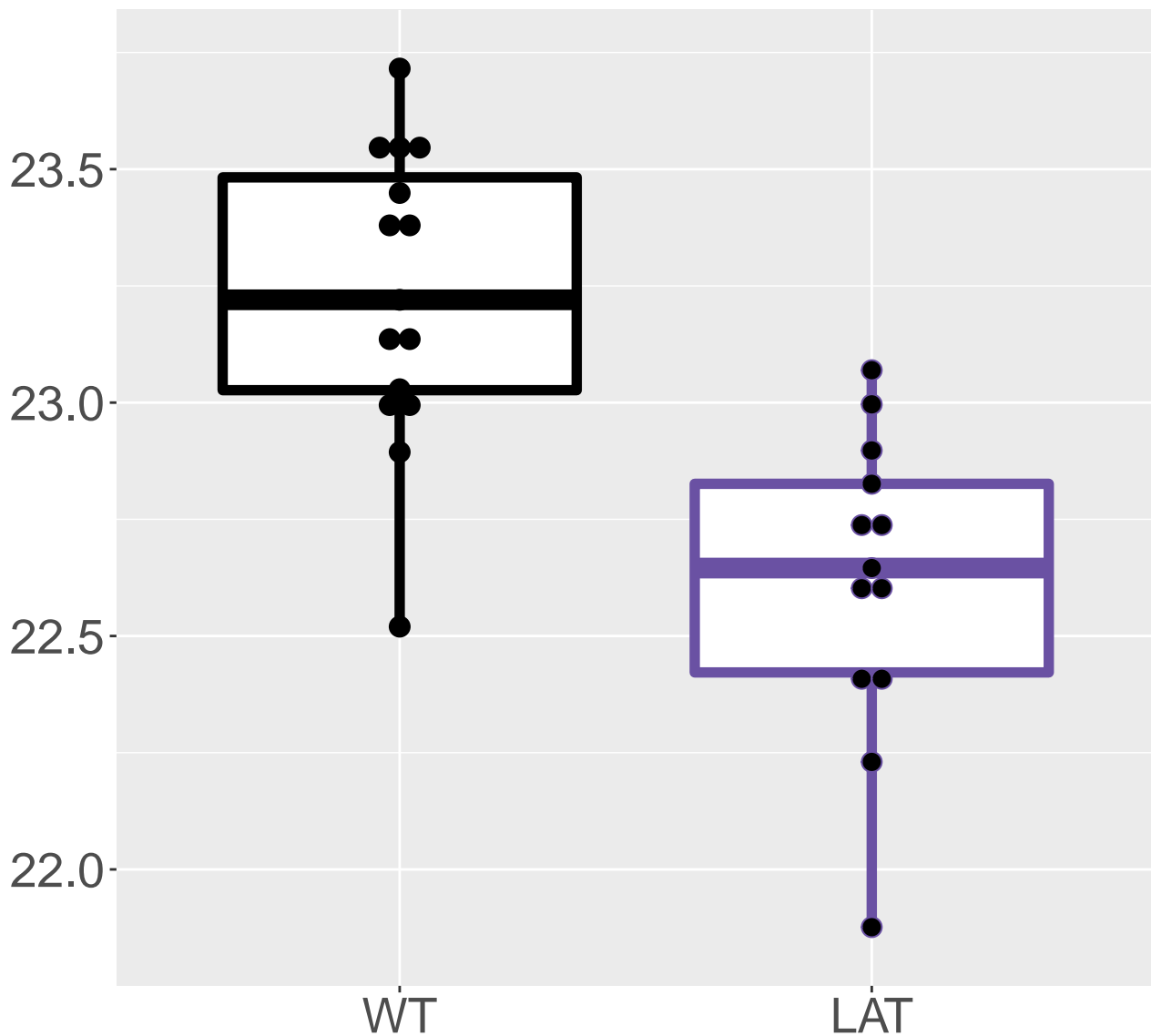
**M881.2589T619.41**

**FDR = 0.00017, FC = -0.95**



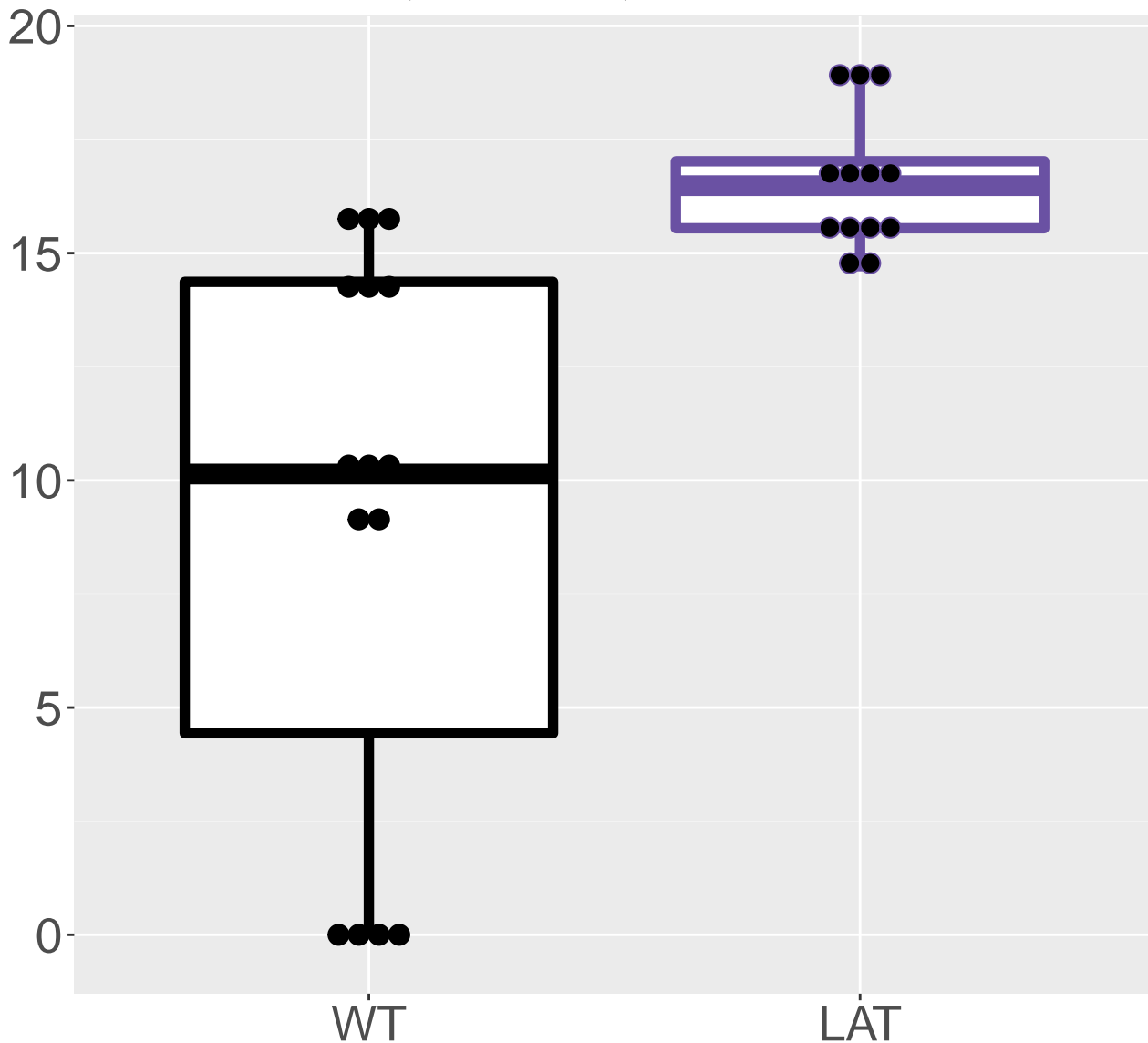
**M292.1403T259.97**

**FDR = 0.00017, FC = -0.61**



**M173.0162T569.42**

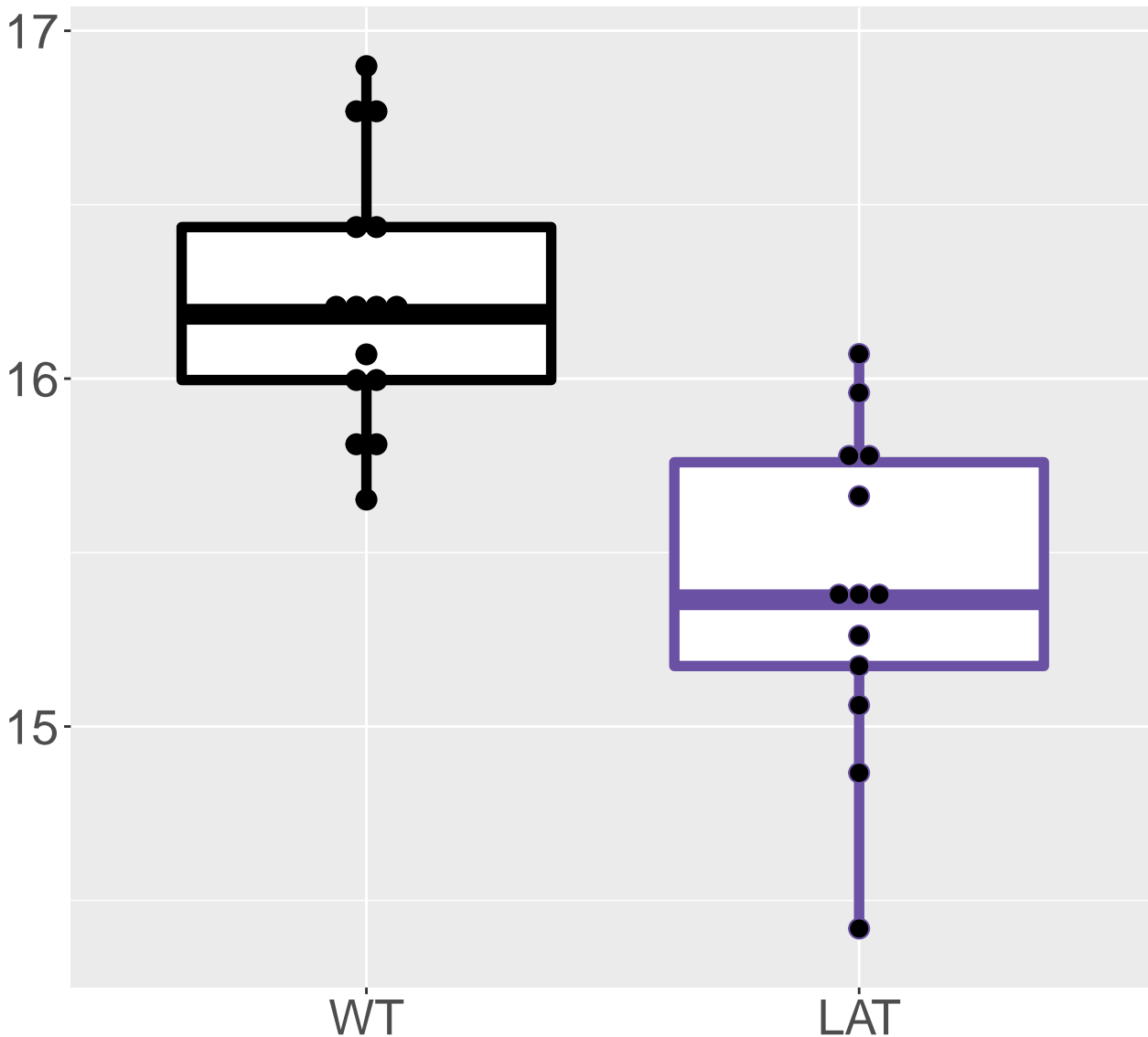
**FDR = 0.00017, FC = 7.3, sex\*\***





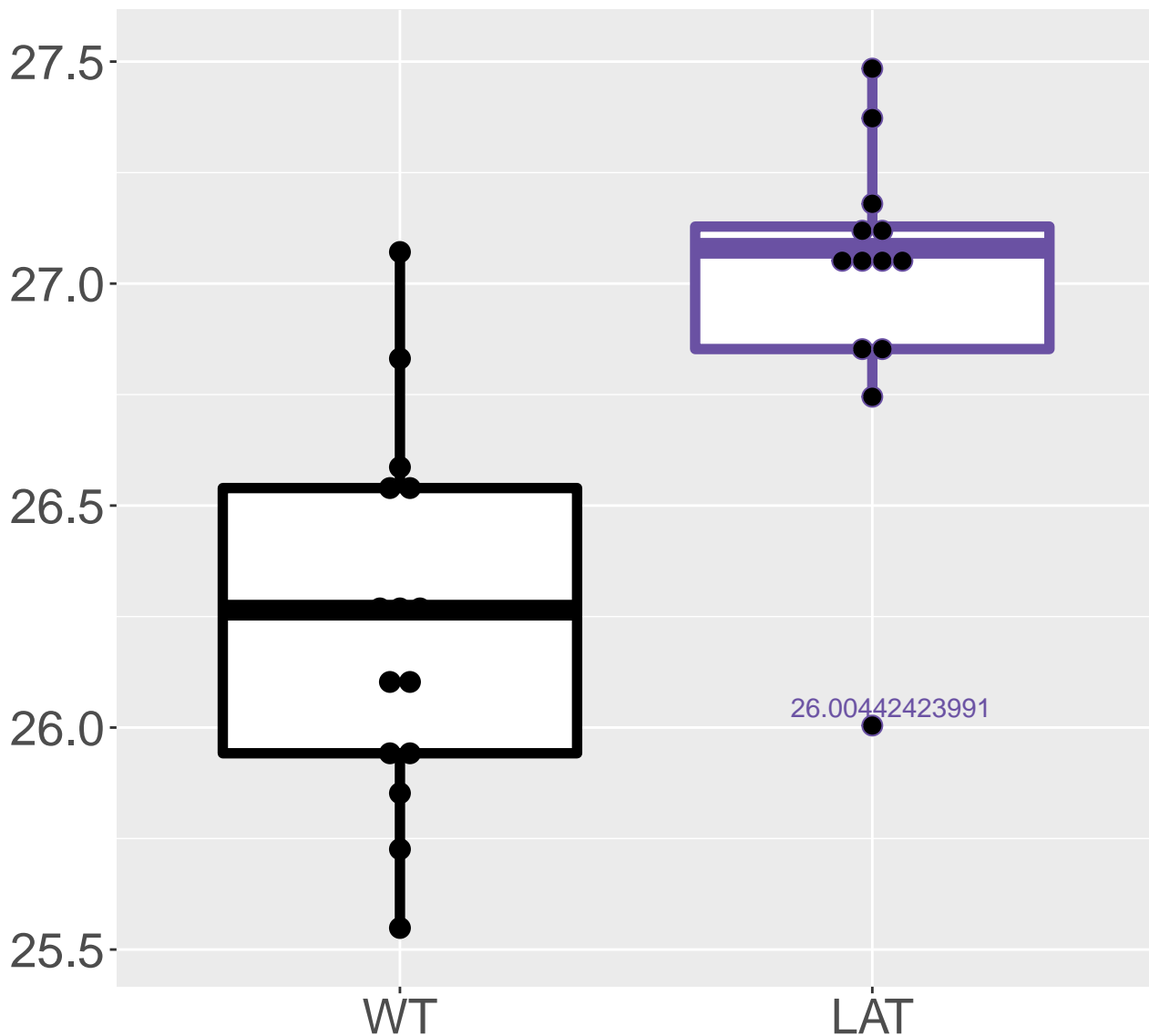
**M322.0777T175.71**

**FDR = 0.00017, FC = -0.83**



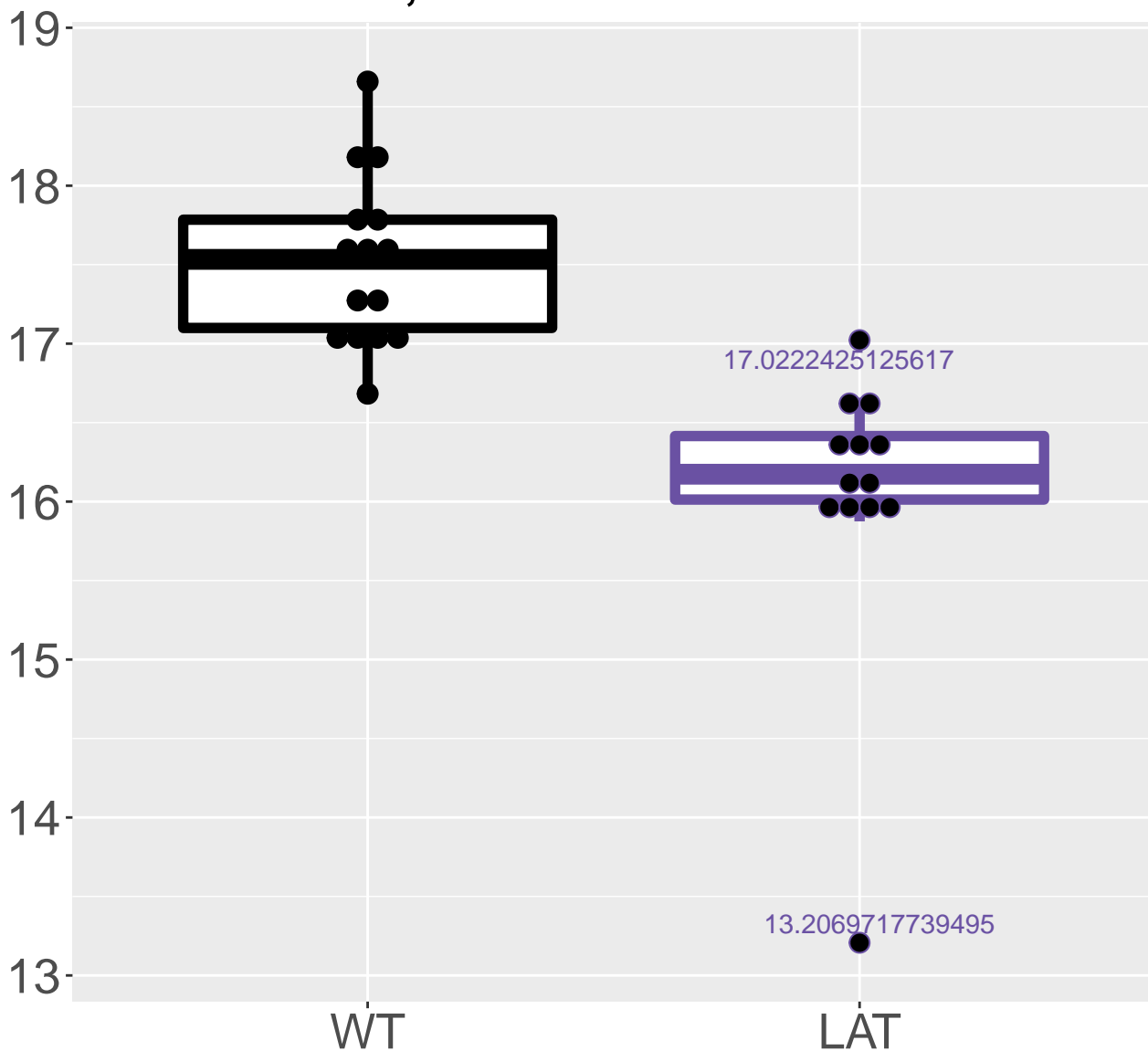
**M267.0739T304.25**

**FDR = 0.00018, FC = 0.76**



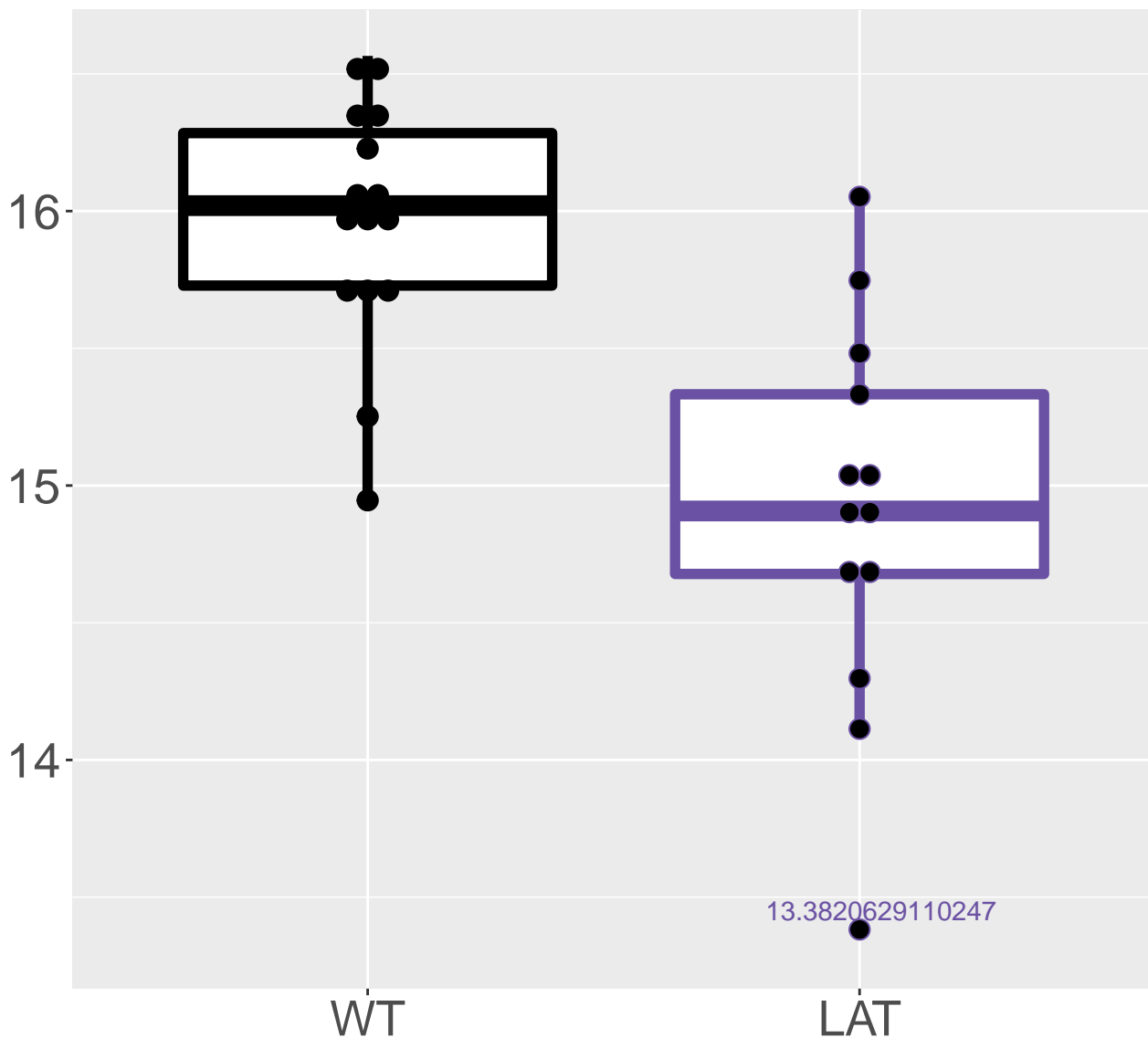
**M411.1626T323.96**

**FDR = 0.00018, FC = -1.5**

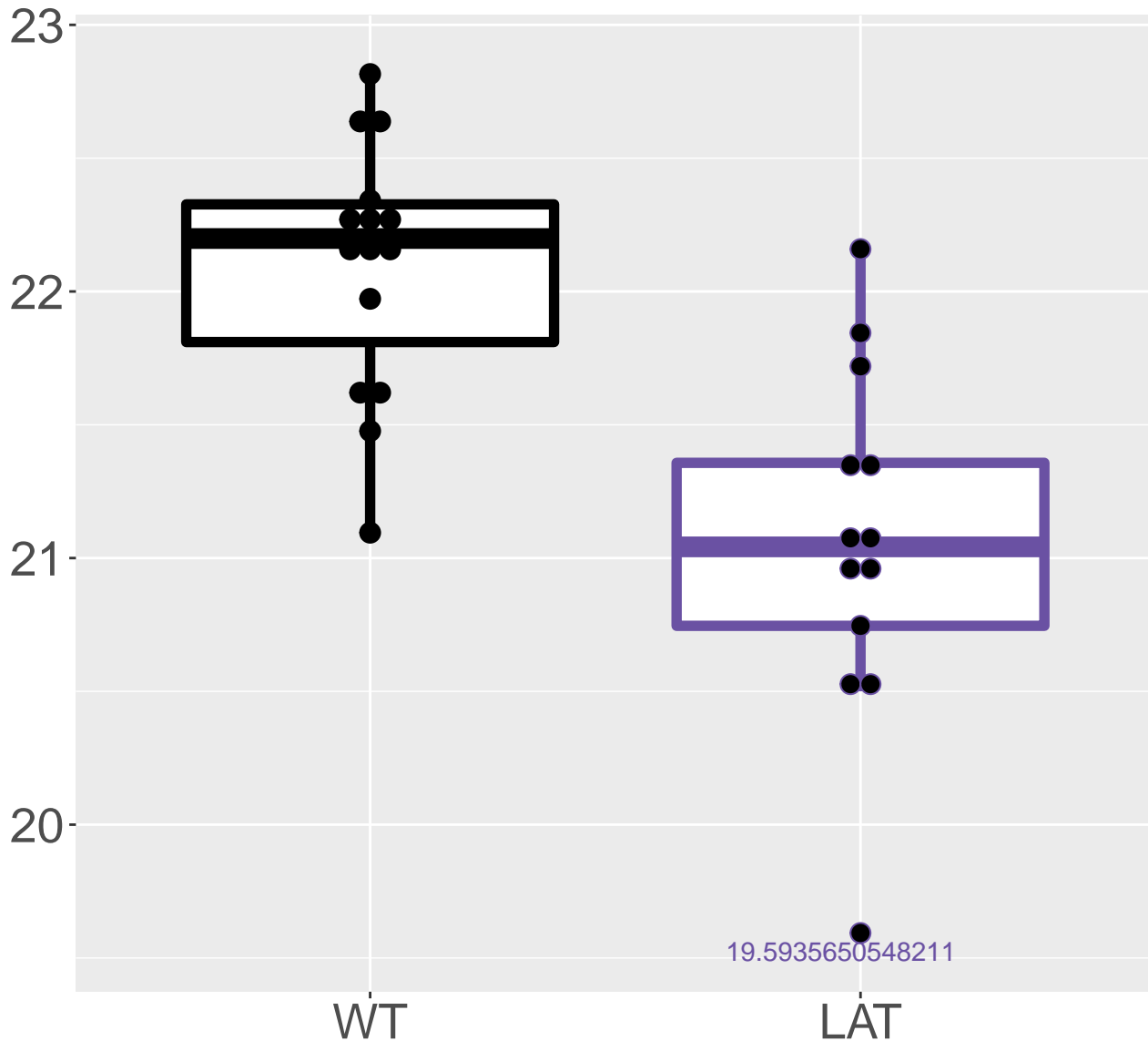


**M813.3265T602.65**

**FDR = 0.00018, FC = -1.1**

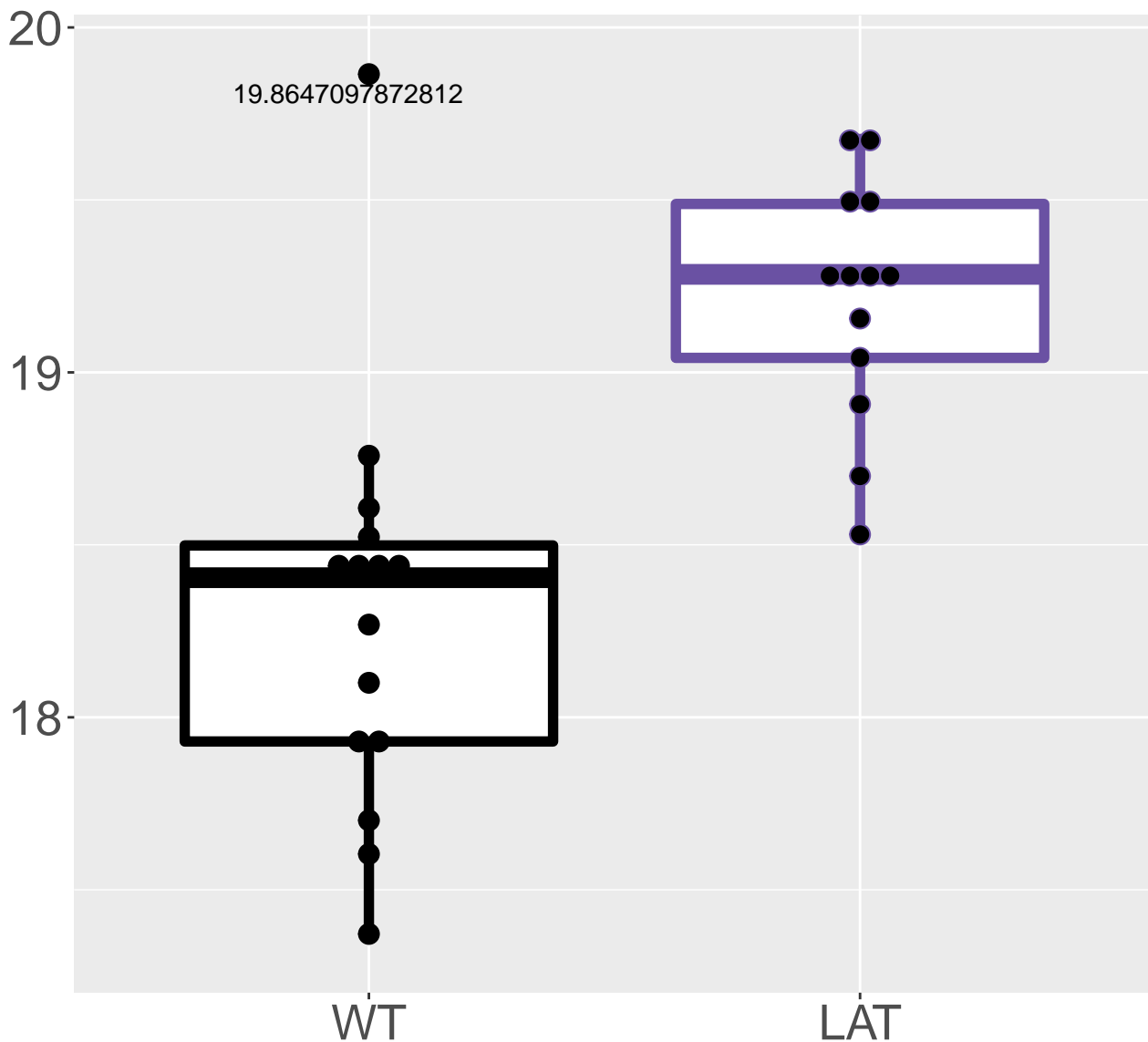


**4-Pyridoxic acid**  
**FDR = 0.00018, FC = -1**



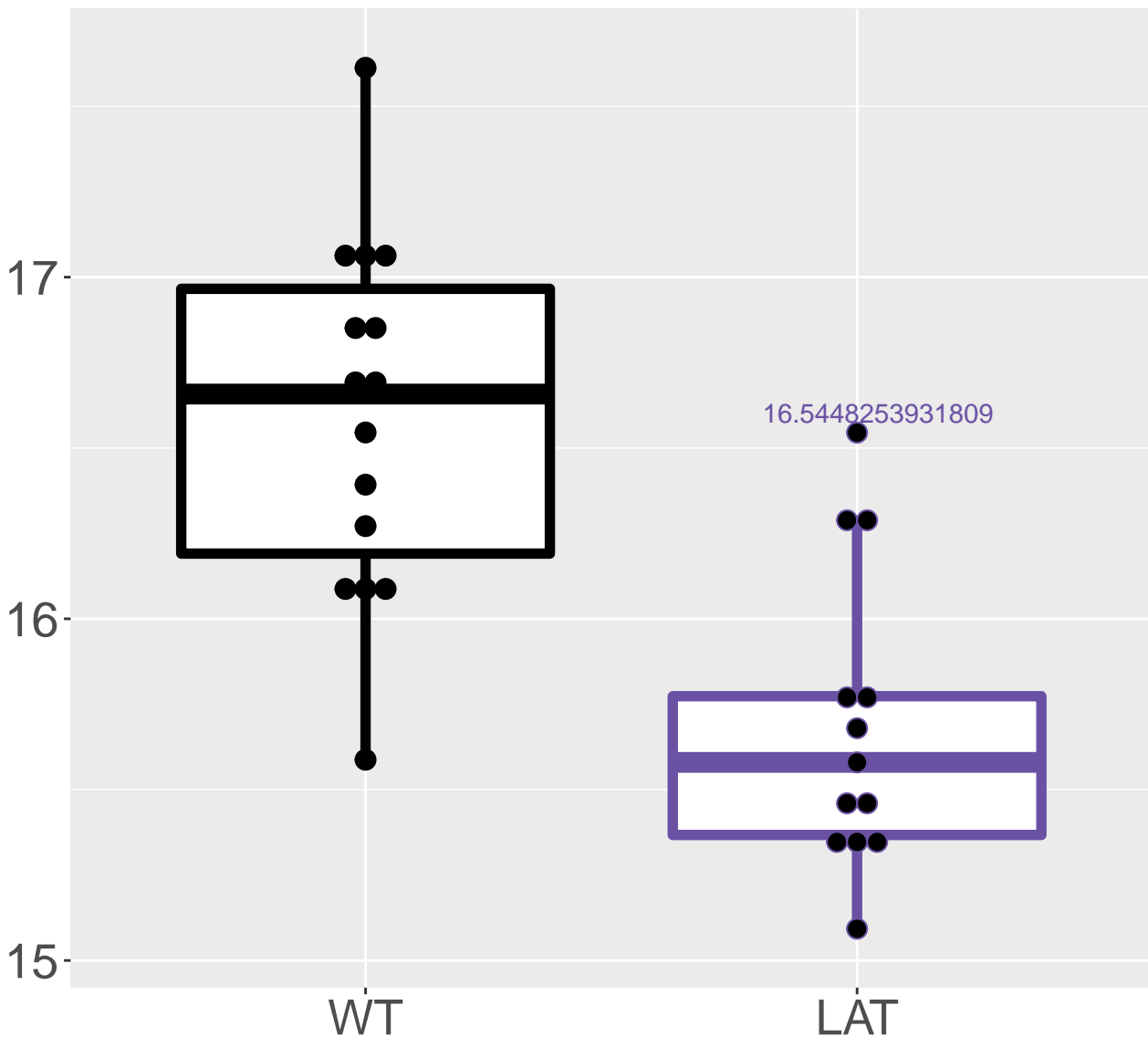
**M419.1076T340.6**

**FDR = 0.00018, FC = 0.93**

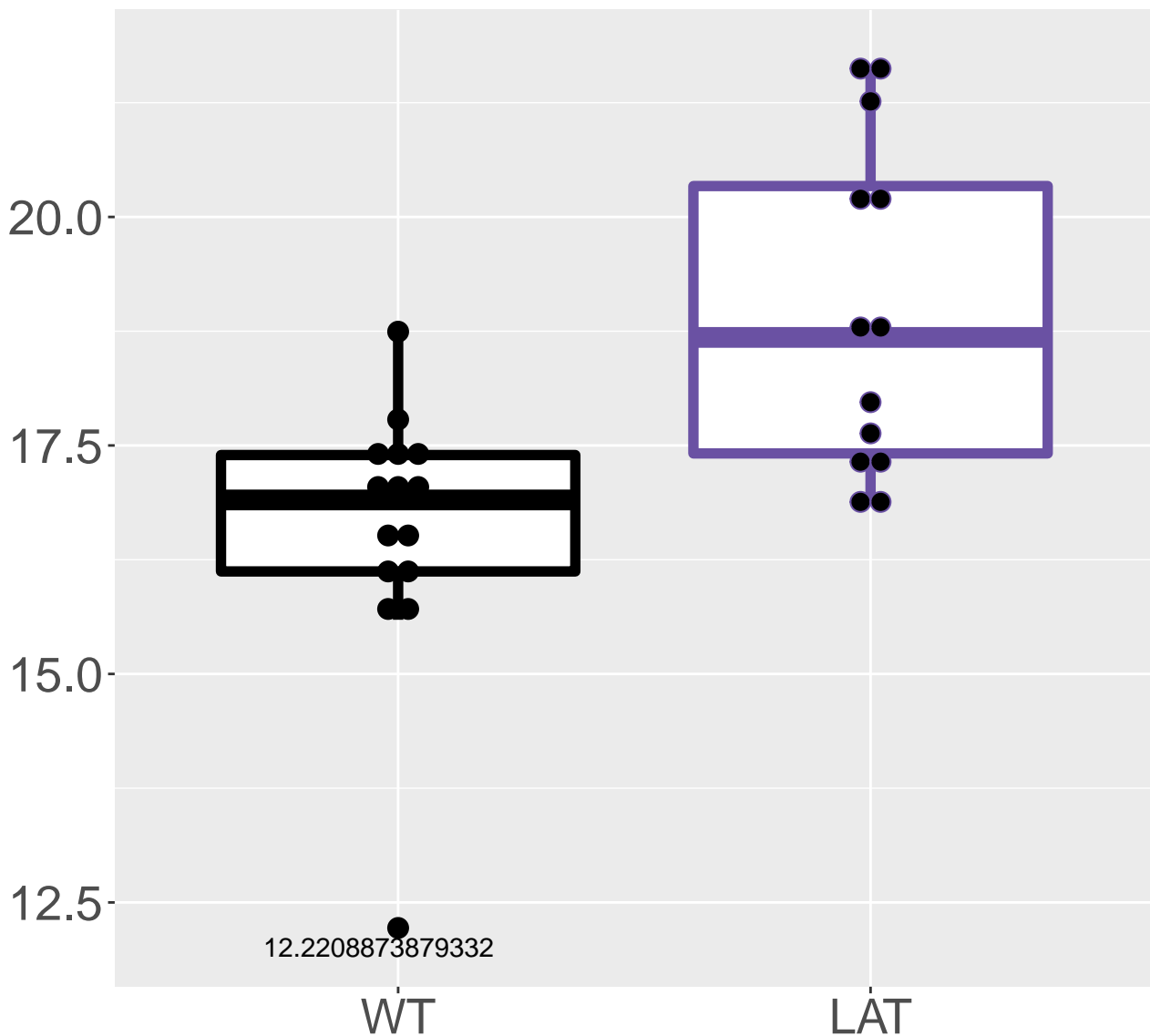


**M223.0761T172.88**

**FDR = 0.00018, FC = -0.91**

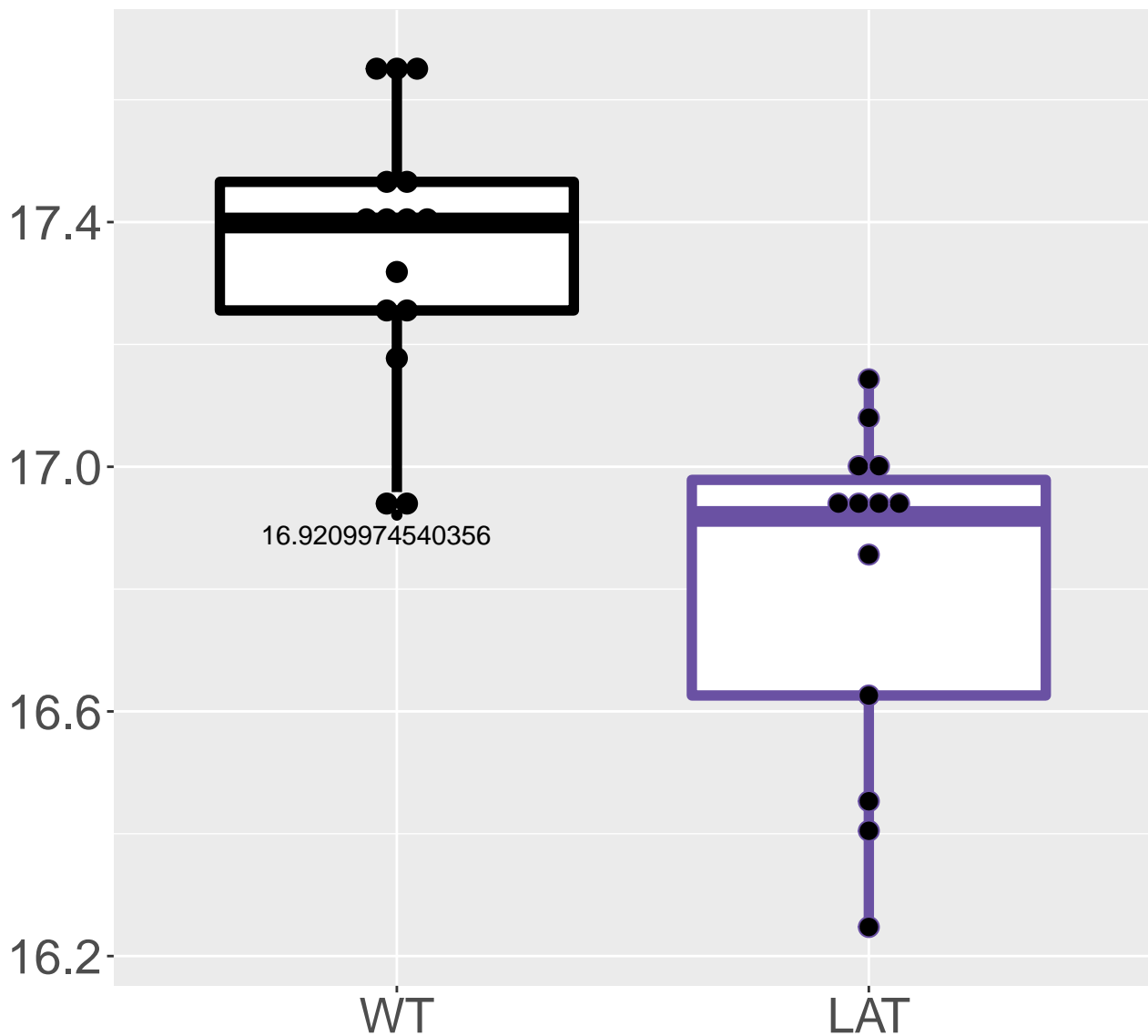


**GMP;Guanosine 5'-monophosphate;Guanosine**  
**FDR = 0.00018, FC = 2.4, sex\*\*\***



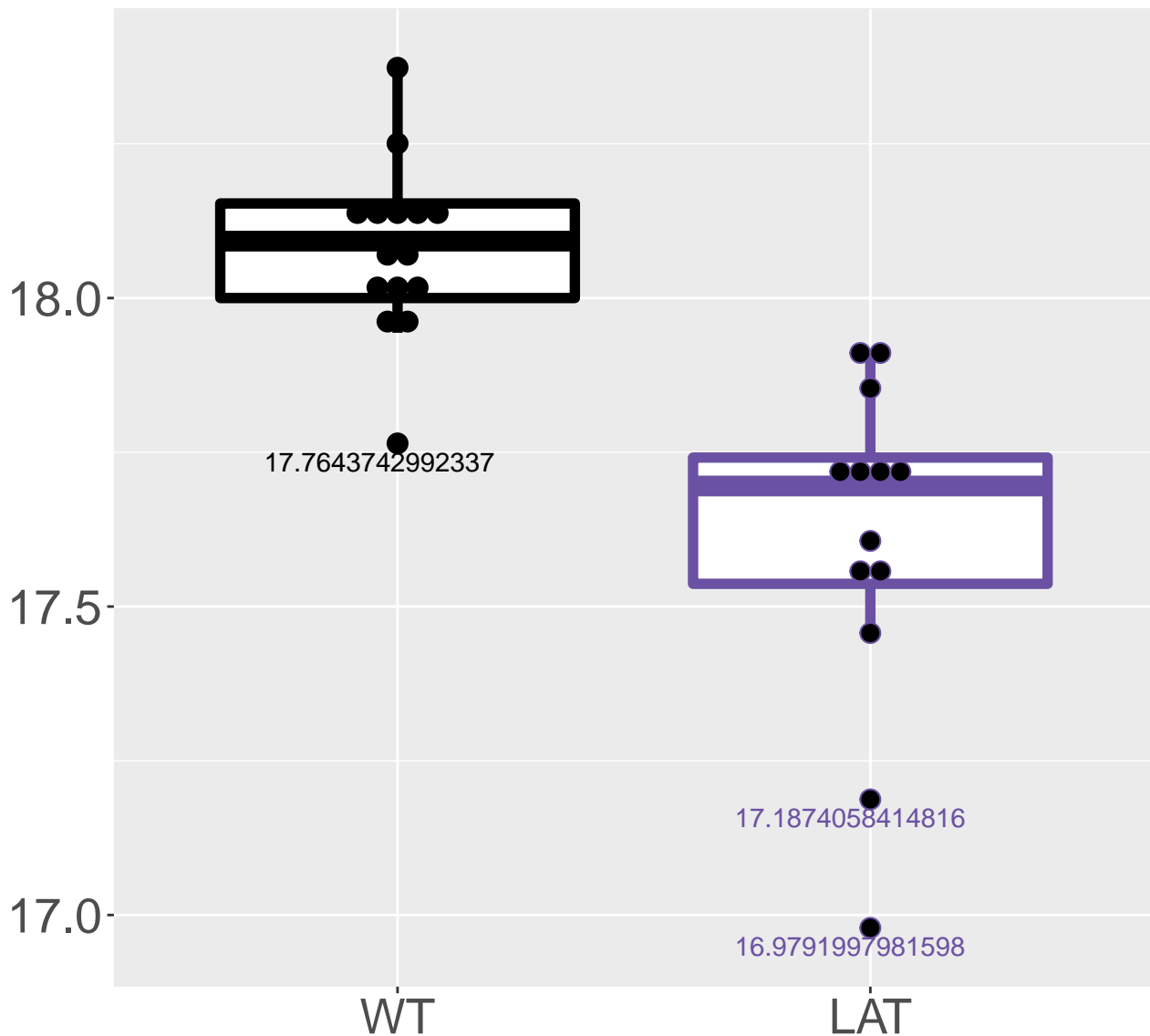


**FDR = 0.00018, FC = -0.55**



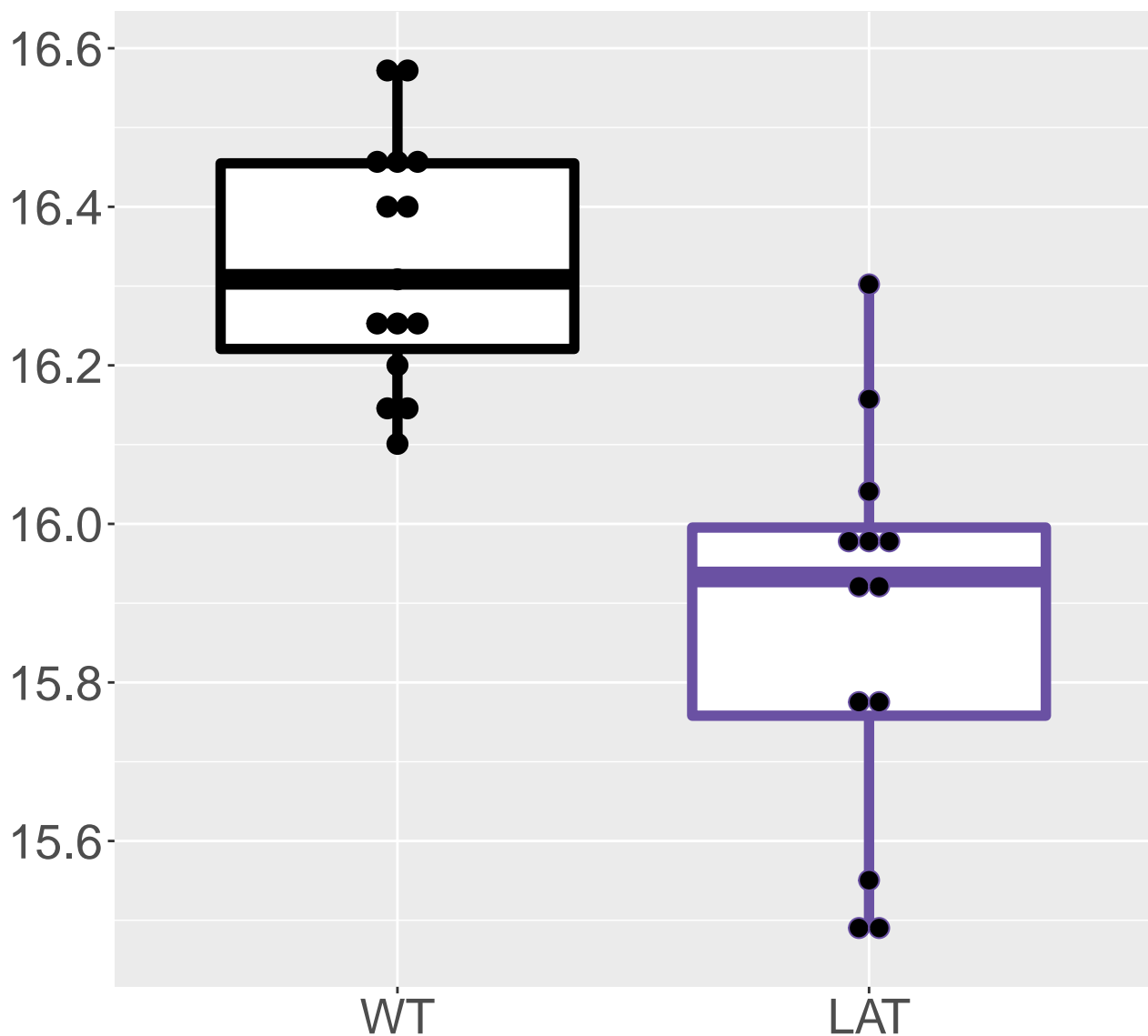
**M118.076T303**

**FDR = 0.00019, FC = -0.47**



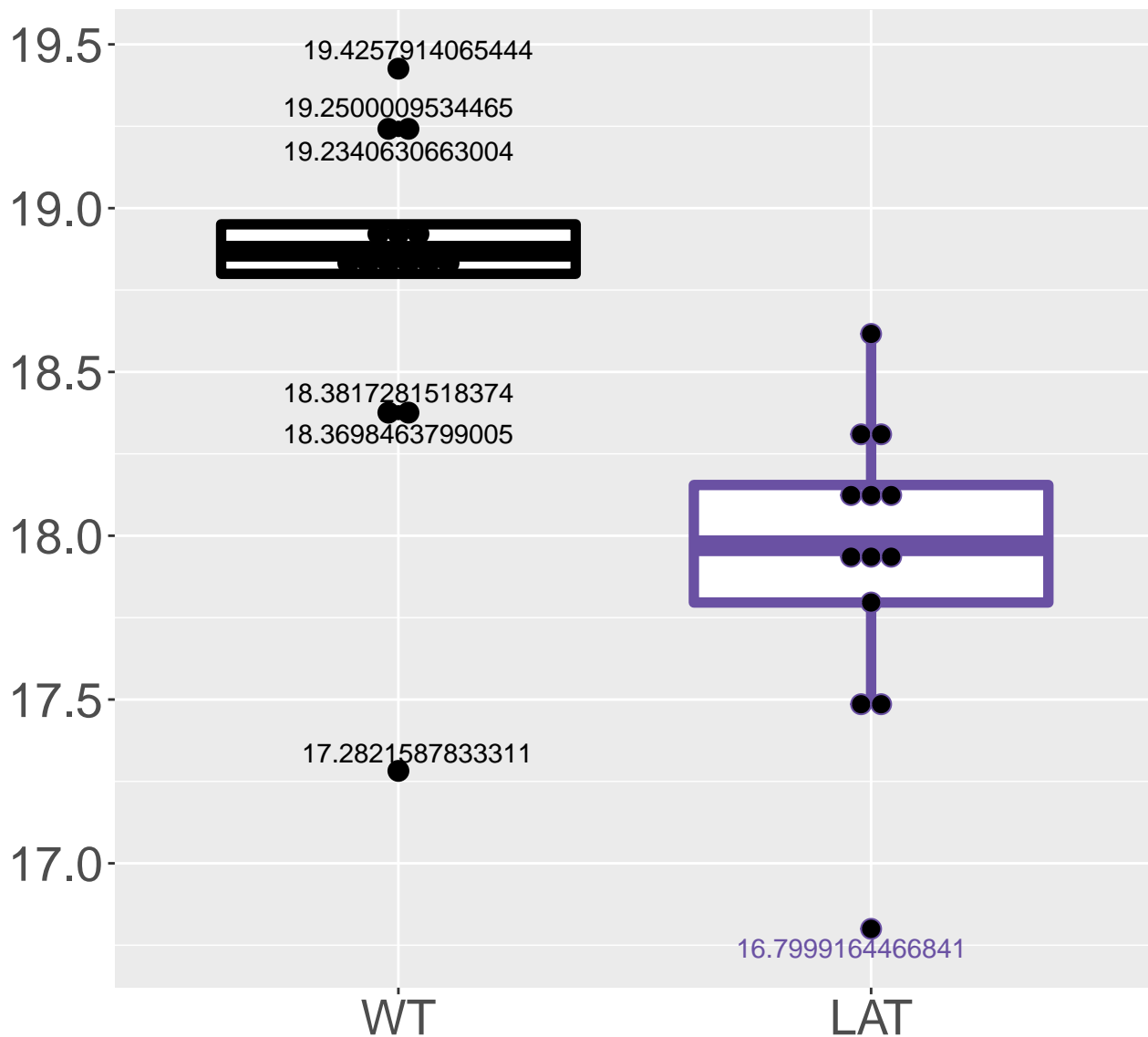
**M330.0848T347.87**

**FDR = 0.00019, FC = -0.46**

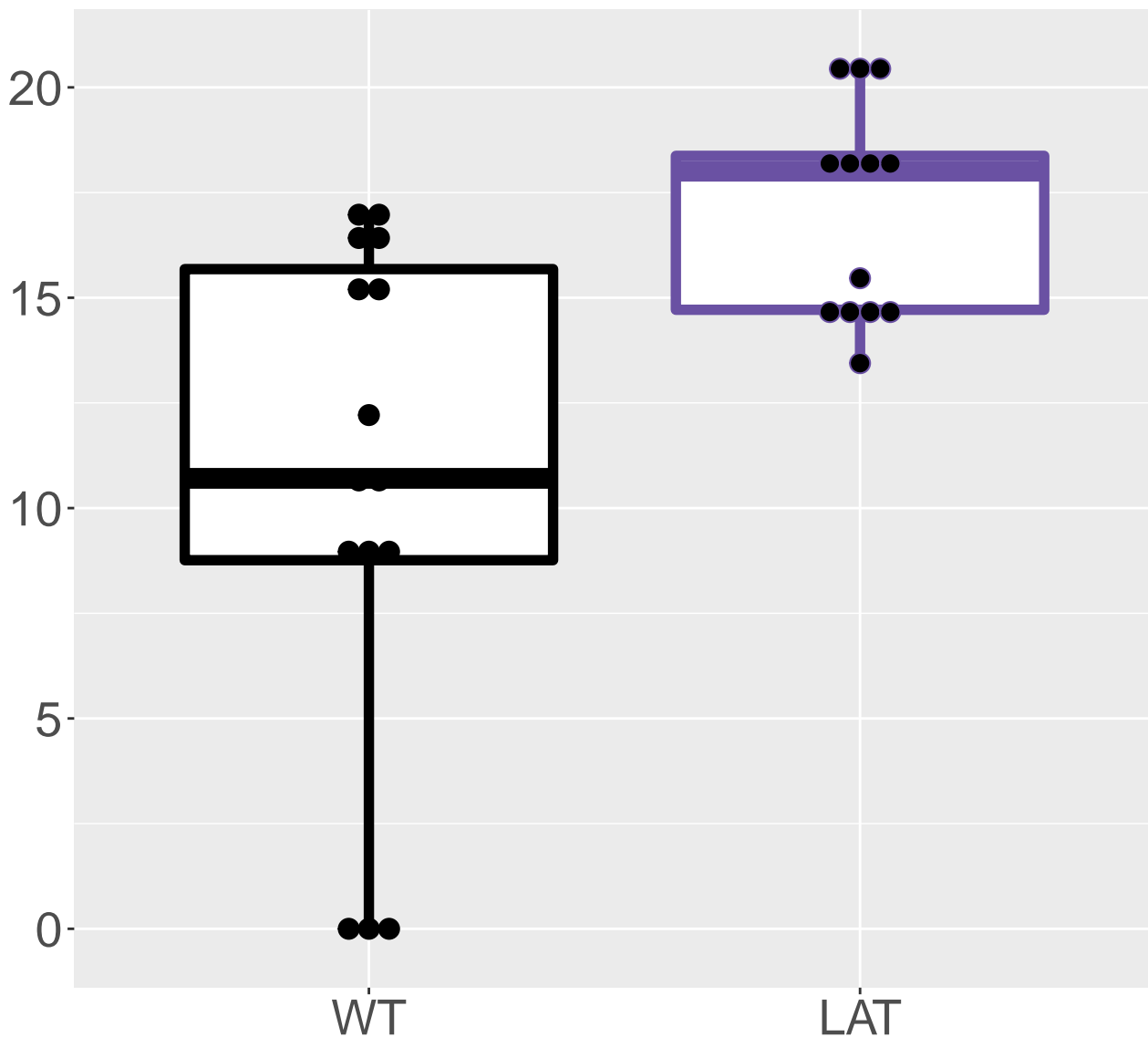


**M460.1678T469.68**

**FDR = 0.00019, FC = -0.86**

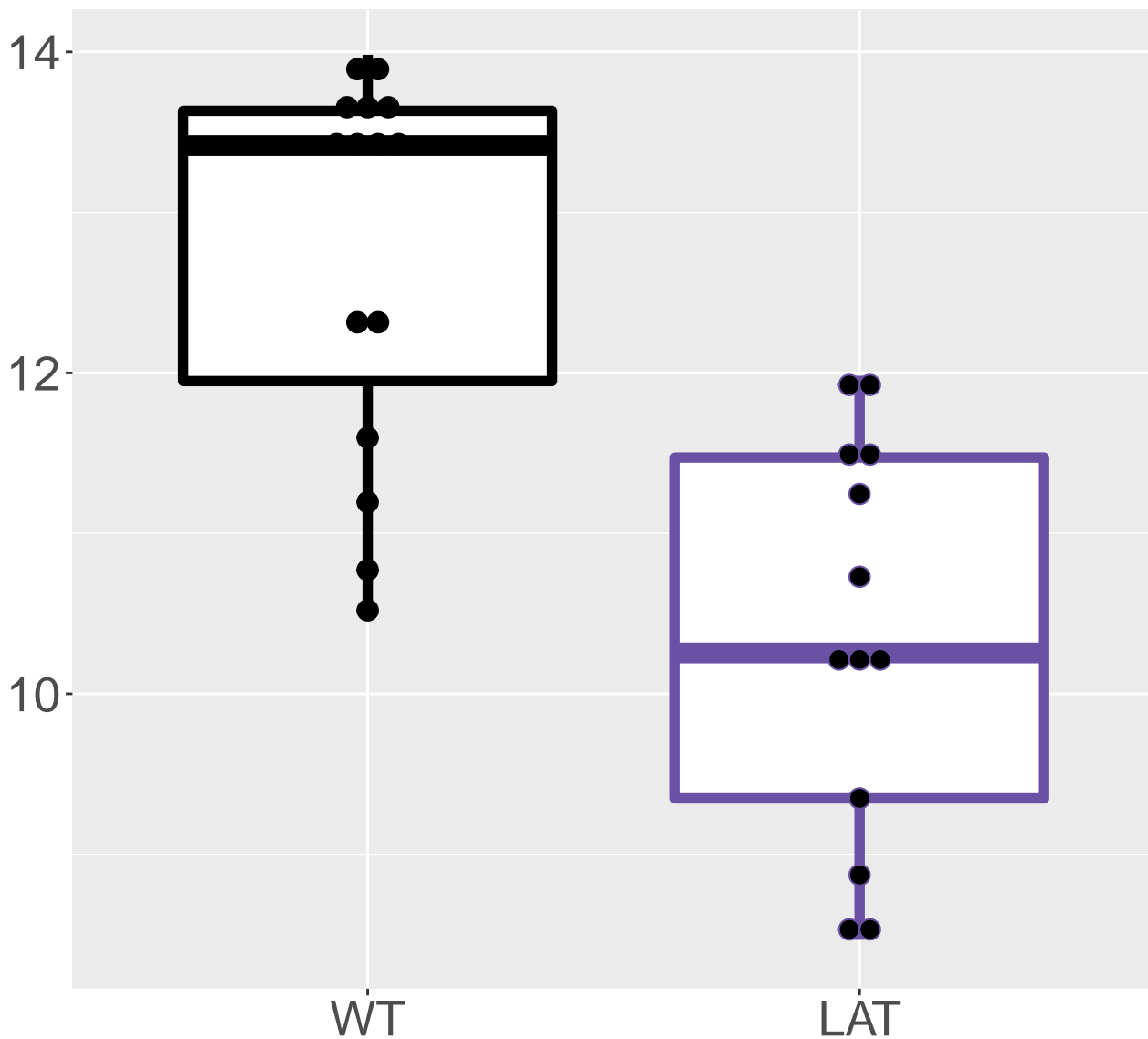


**Inosine 5'-monophosphate;IMP;5'-inosinic acid**  
**FDR = 2e-04, FC = 6.6, sex\*\*\***



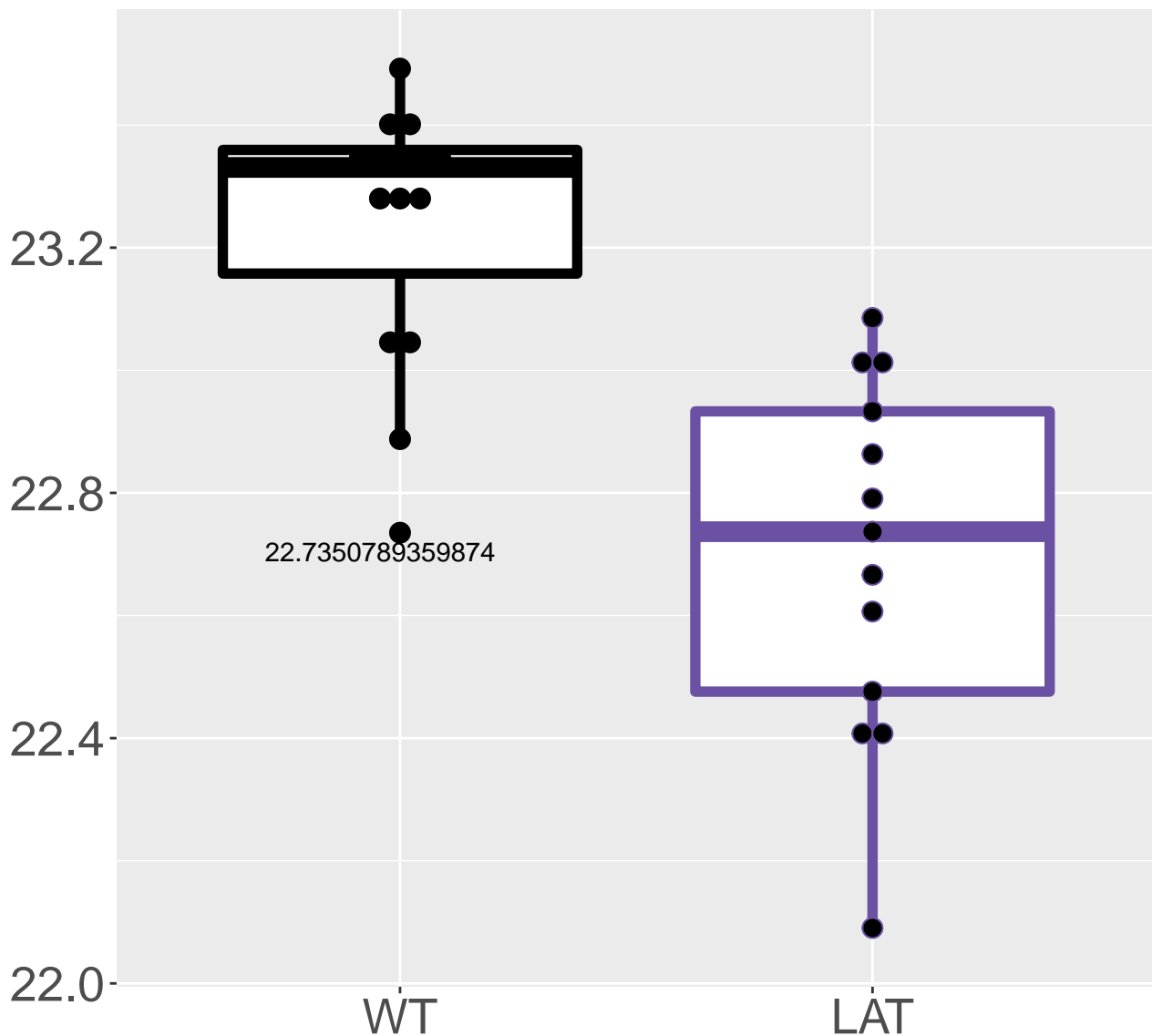
**M149.001T105.36**

**FDR = 2e-04, FC = -2.4**

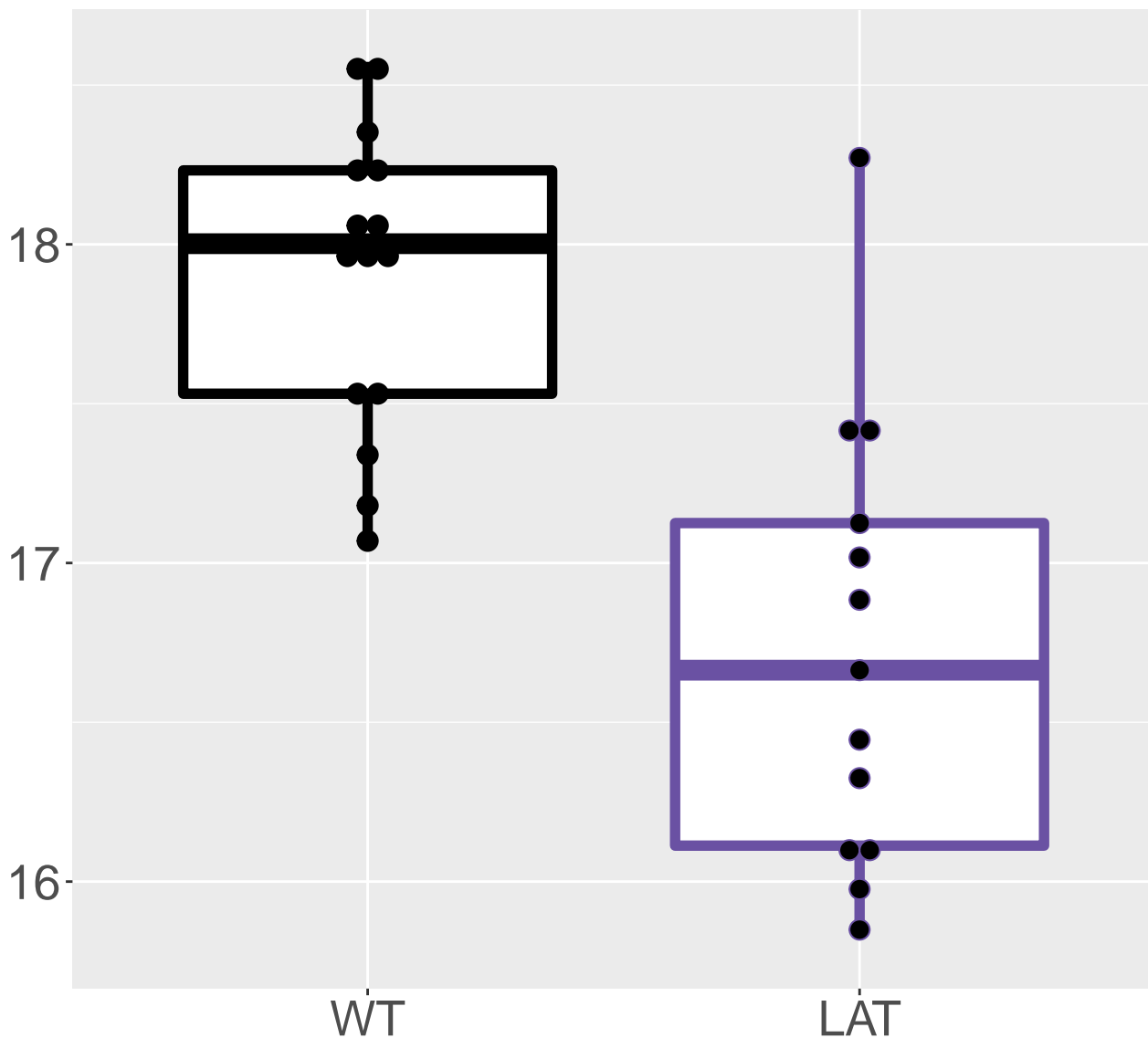


**M131.0907T216.71**

**FDR = 2e-04, FC = -0.54**

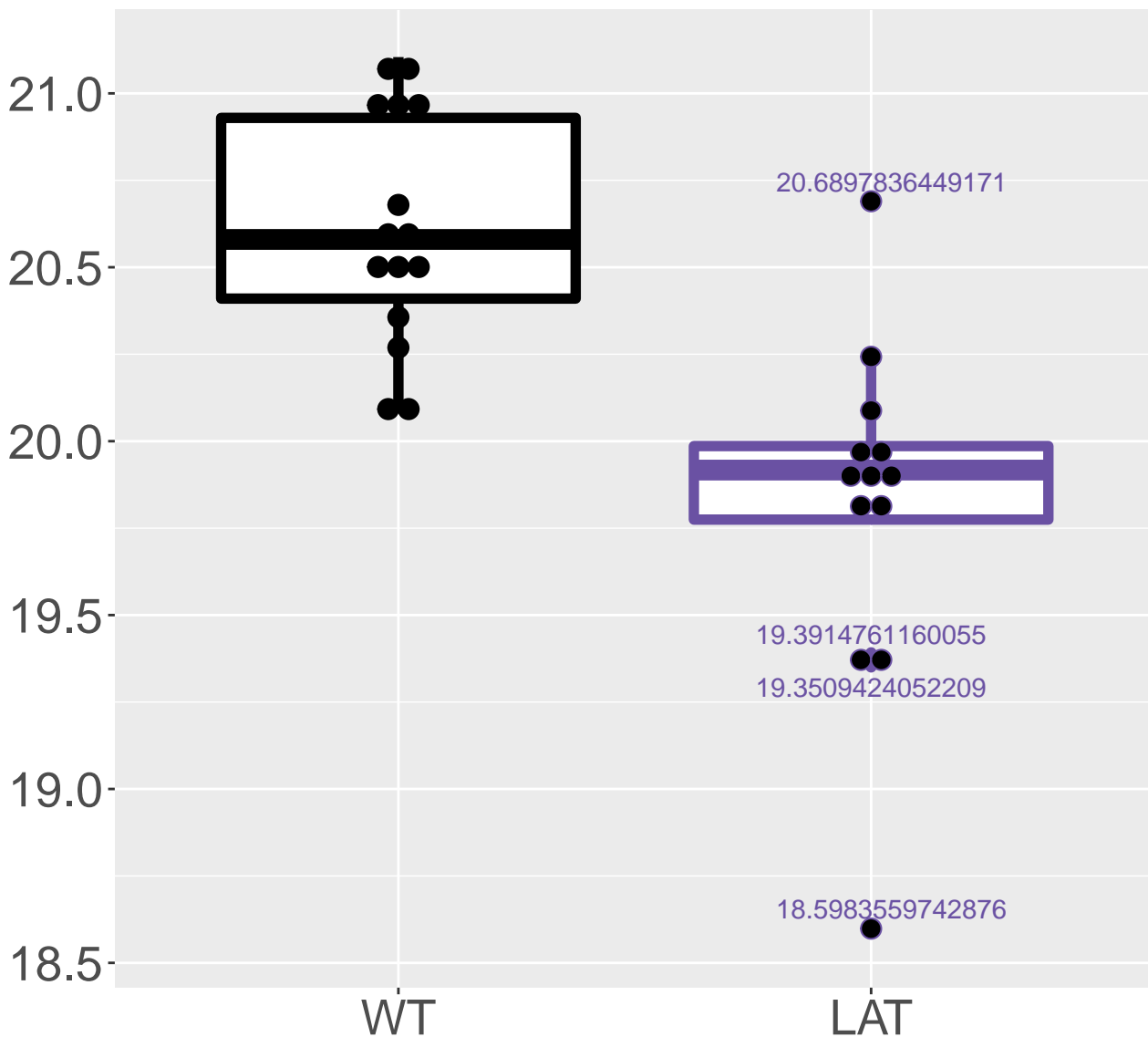


**M890.264T594.5**  
**FDR = 2e-04, FC = -1.2**

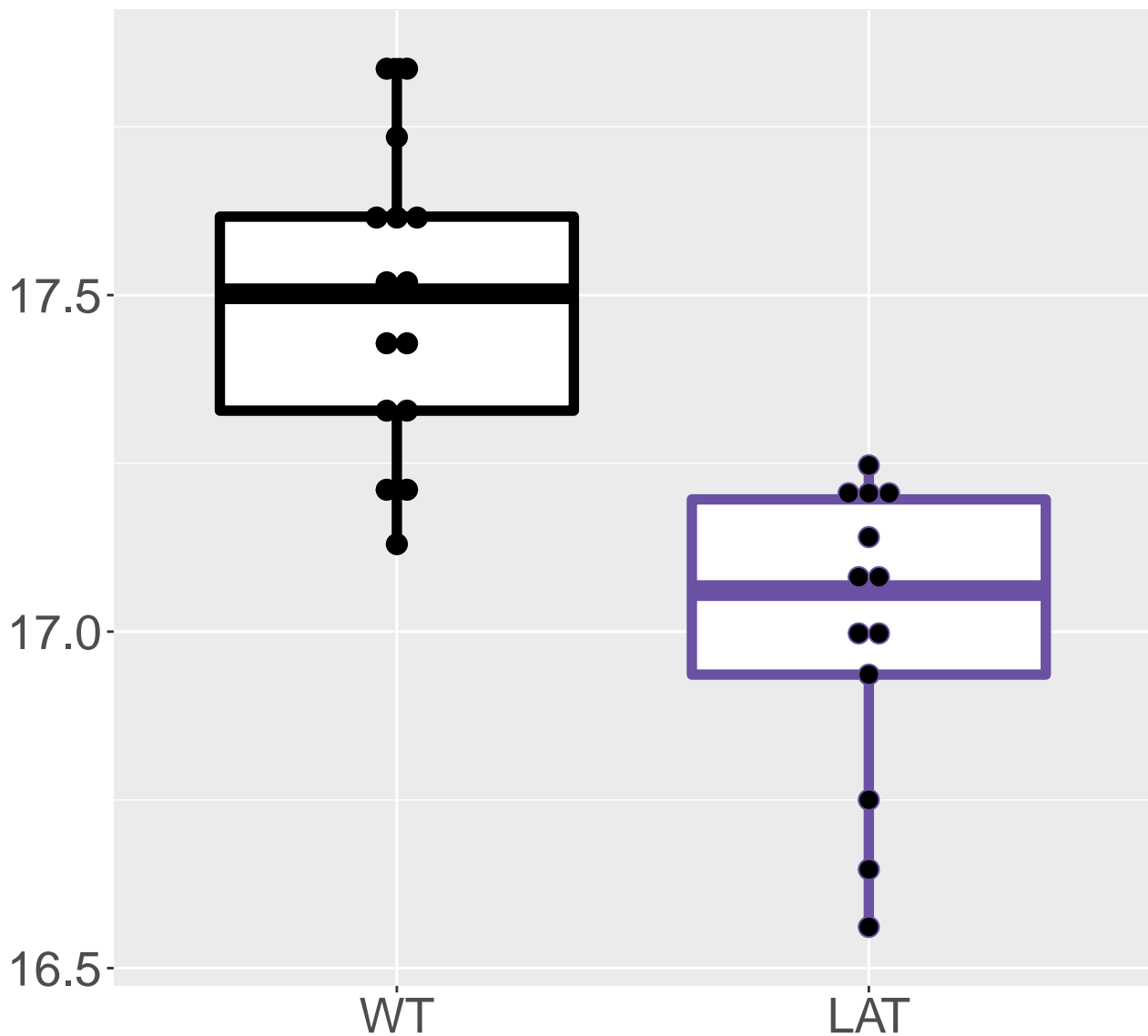




**FDR = 0.00023, FC = -0.79**

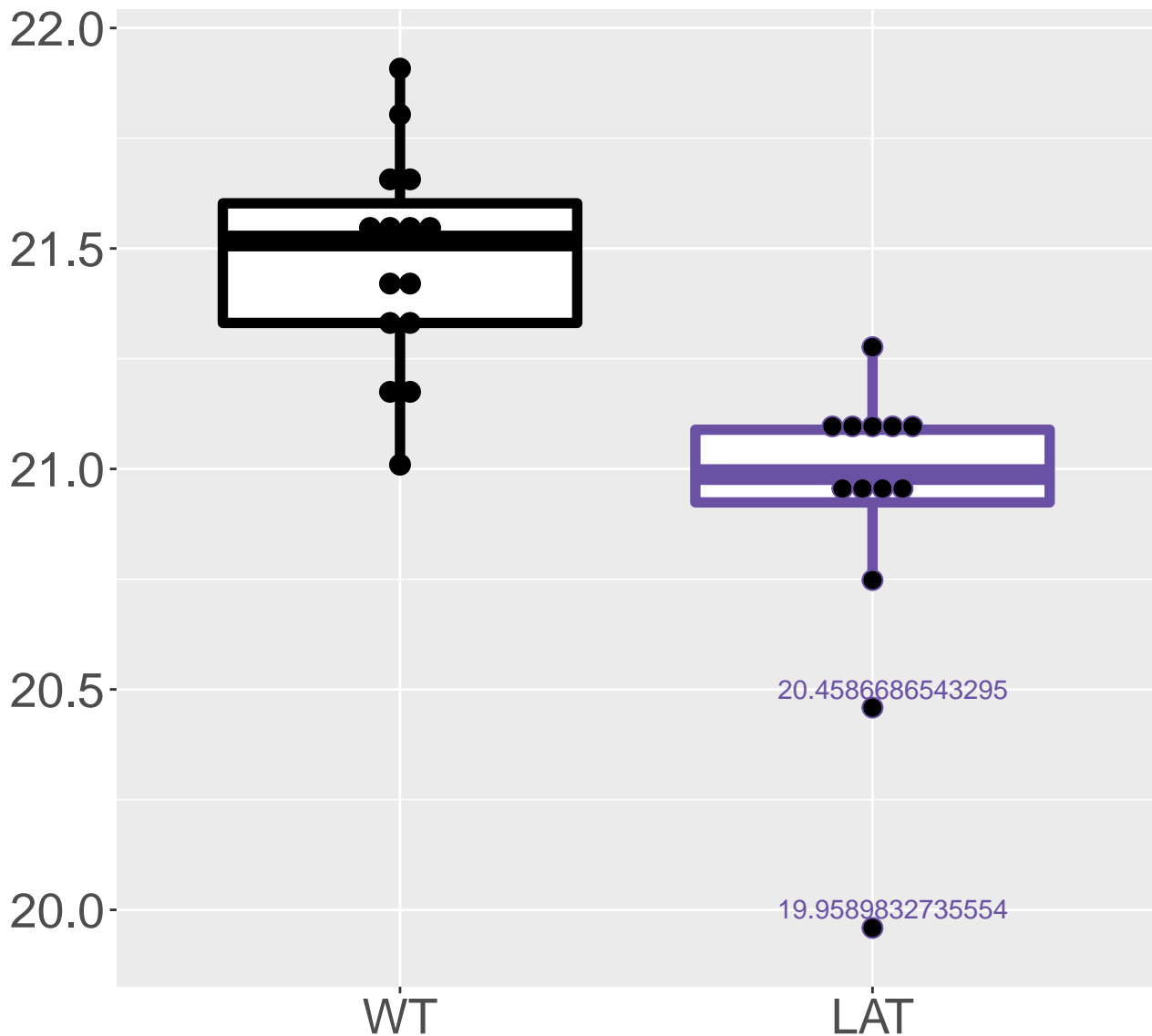


**Dihydrofolic acid**  
**FDR = 0.00023, FC = -0.49**



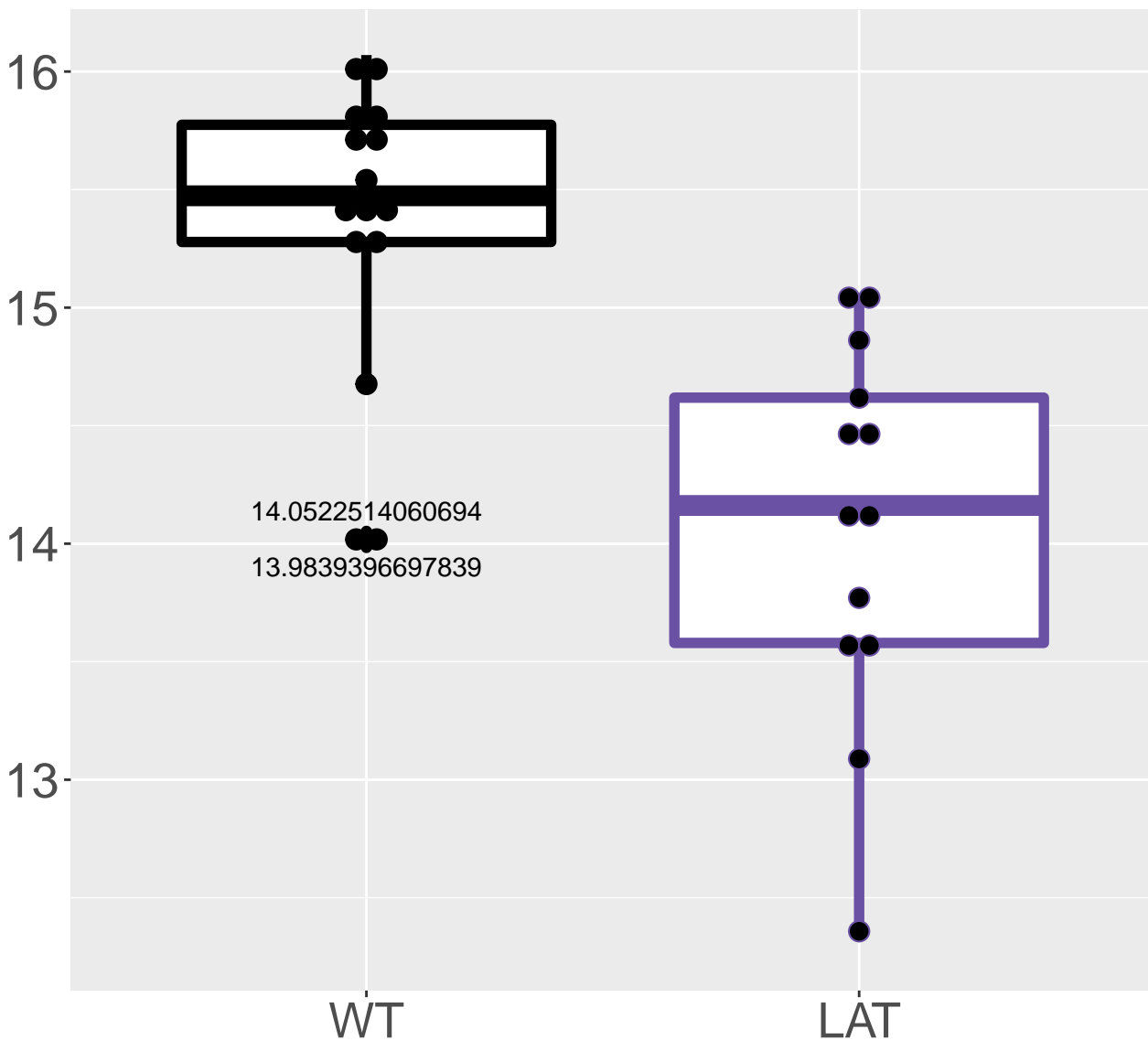
**M447.1523T239.67**

**FDR = 0.00023, FC = -0.57**



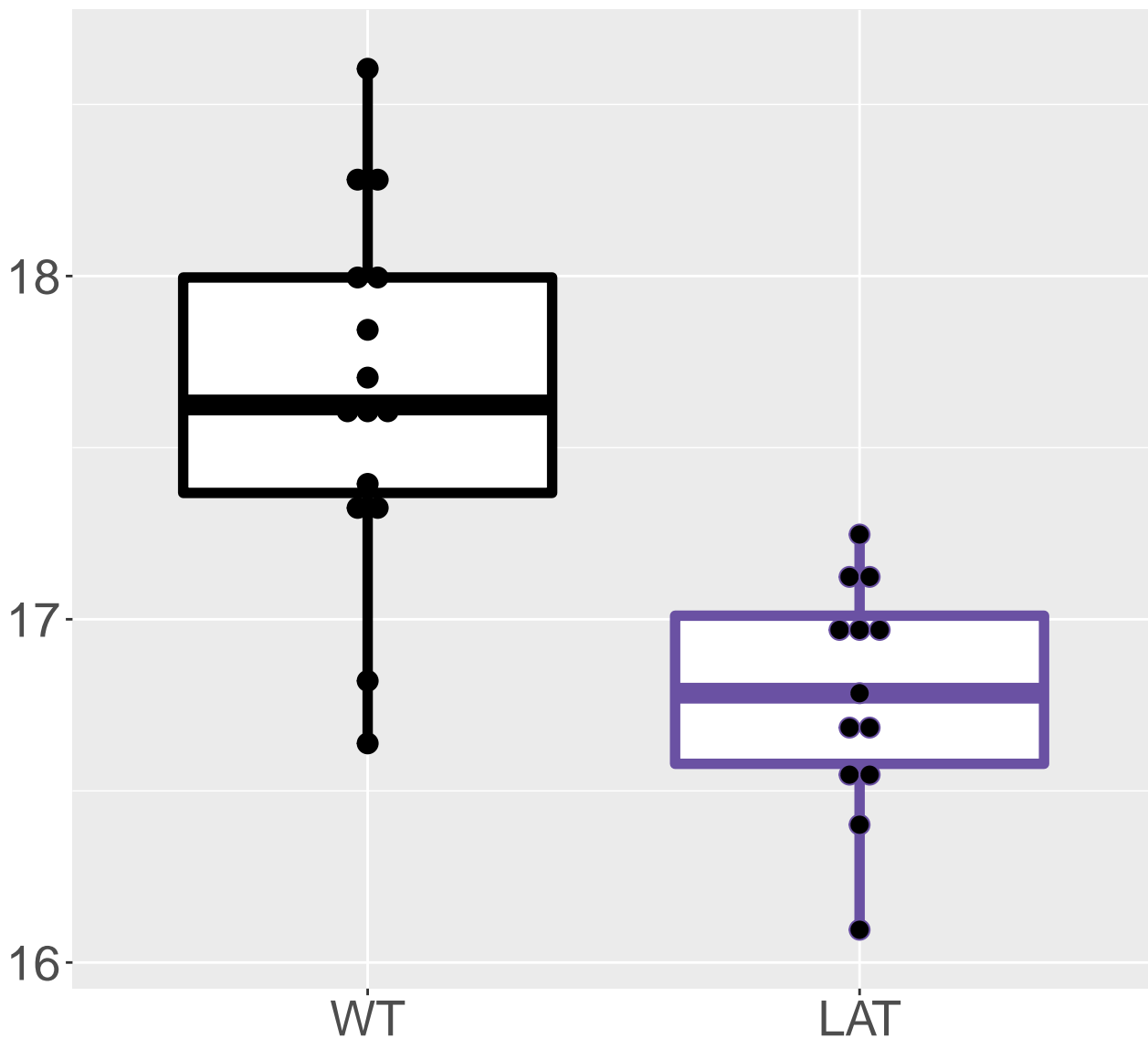
**M424.1576T325.01**

**FDR = 0.00023, FC = -1.3**

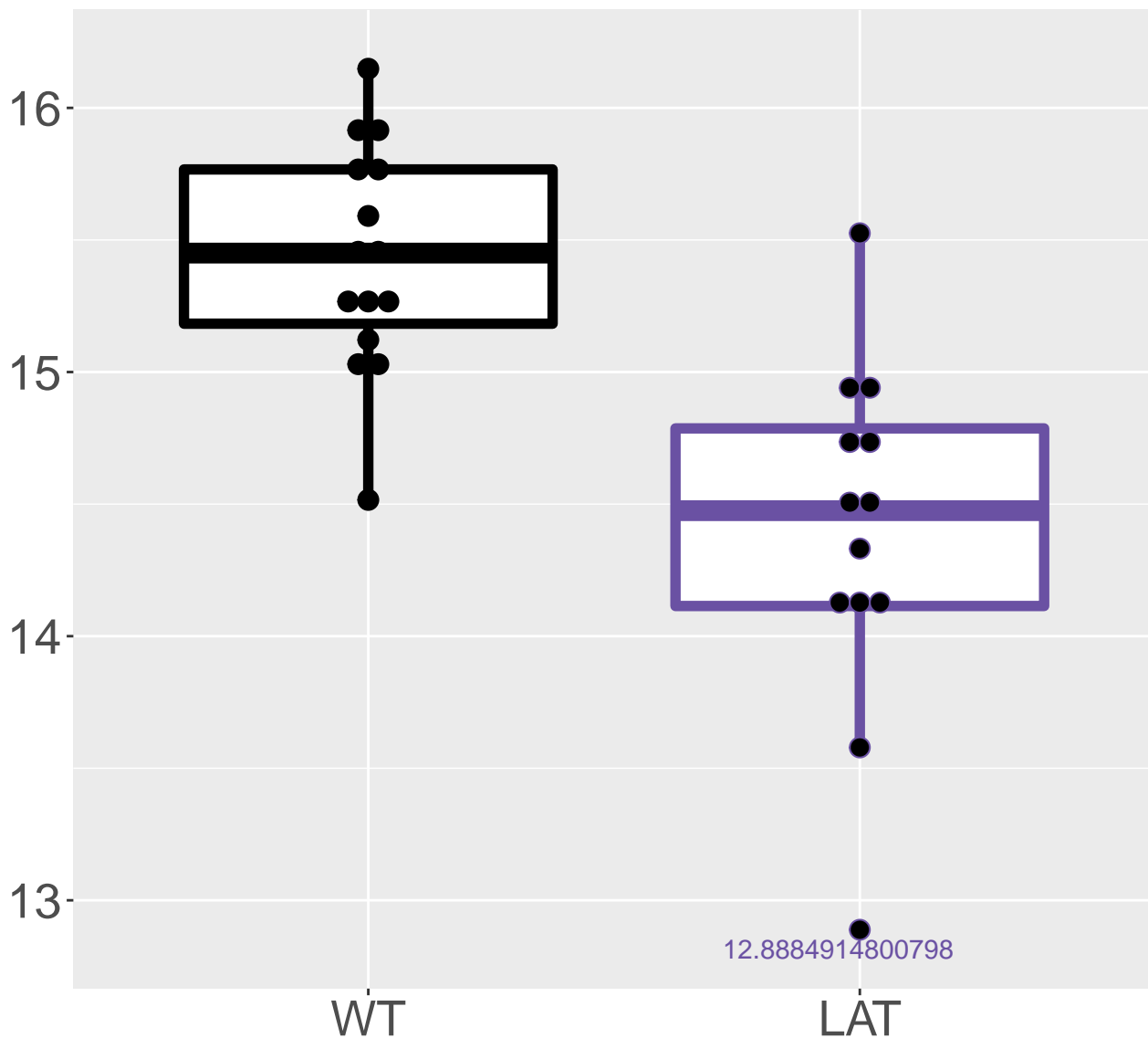


**M317.1146T324.44**

**FDR = 0.00023, FC = -0.89**

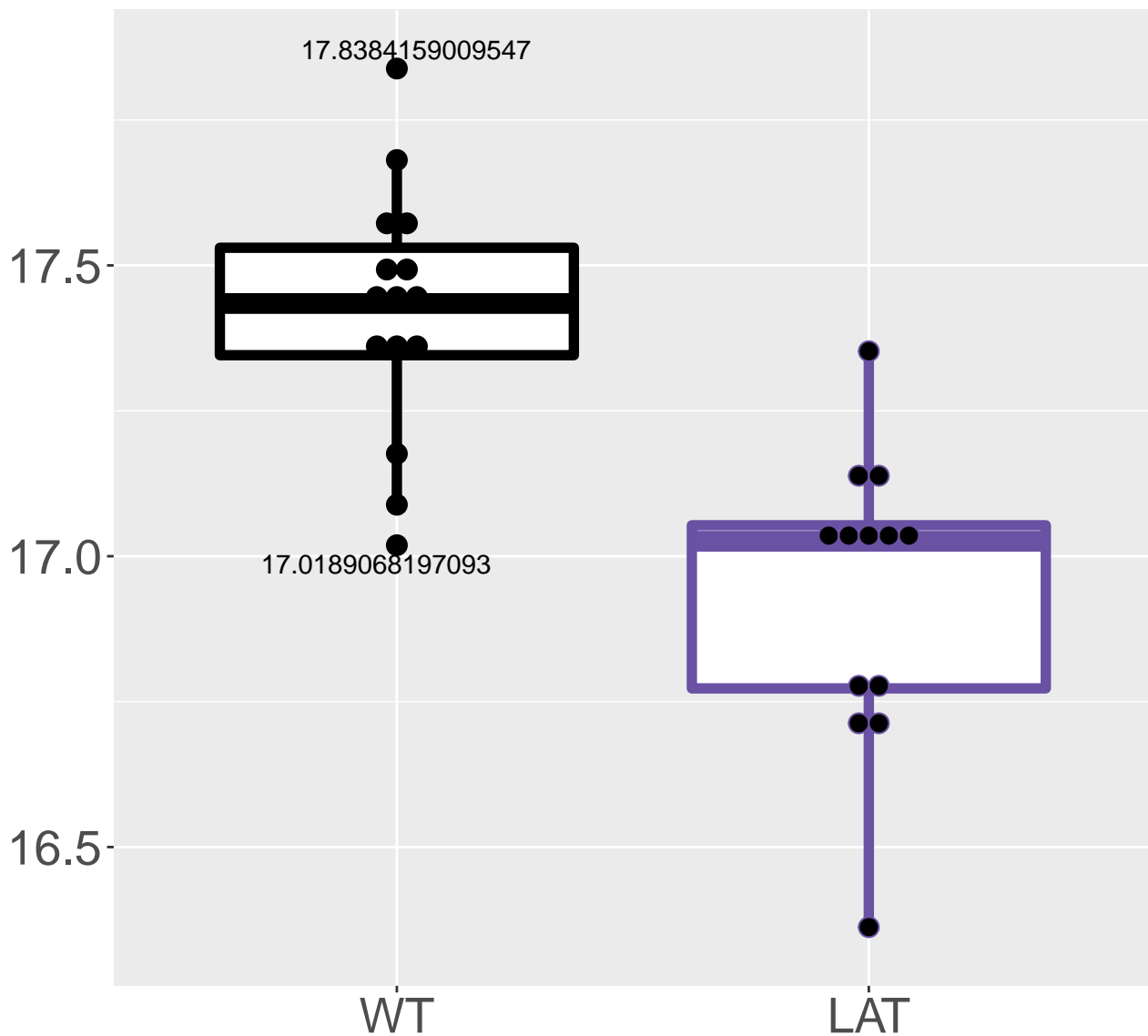


**M882.2613T619.36**  
**FDR = 0.00024, FC = -1**



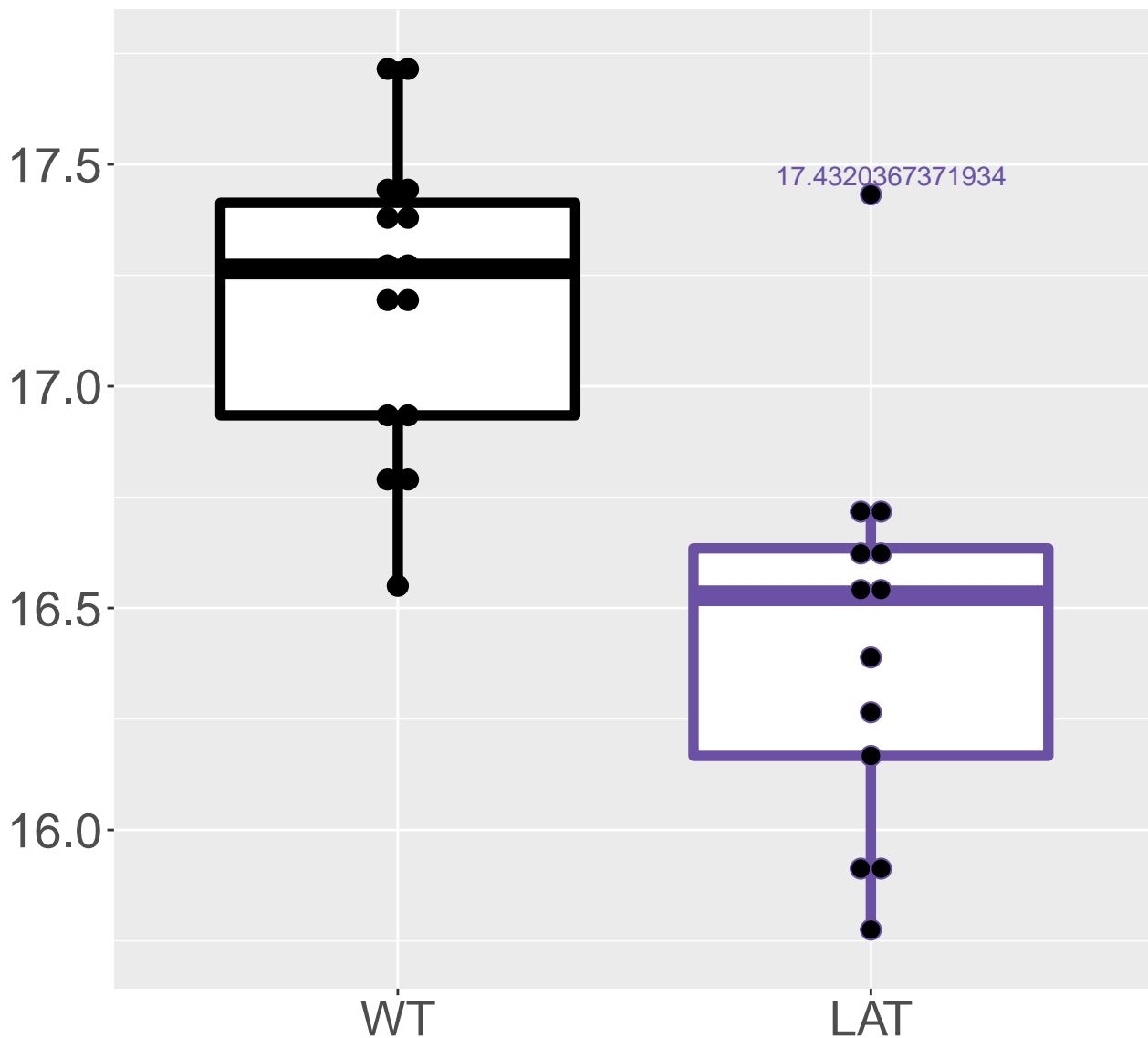
**M189.0518T561.67**

**FDR = 0.00025, FC = -0.49**



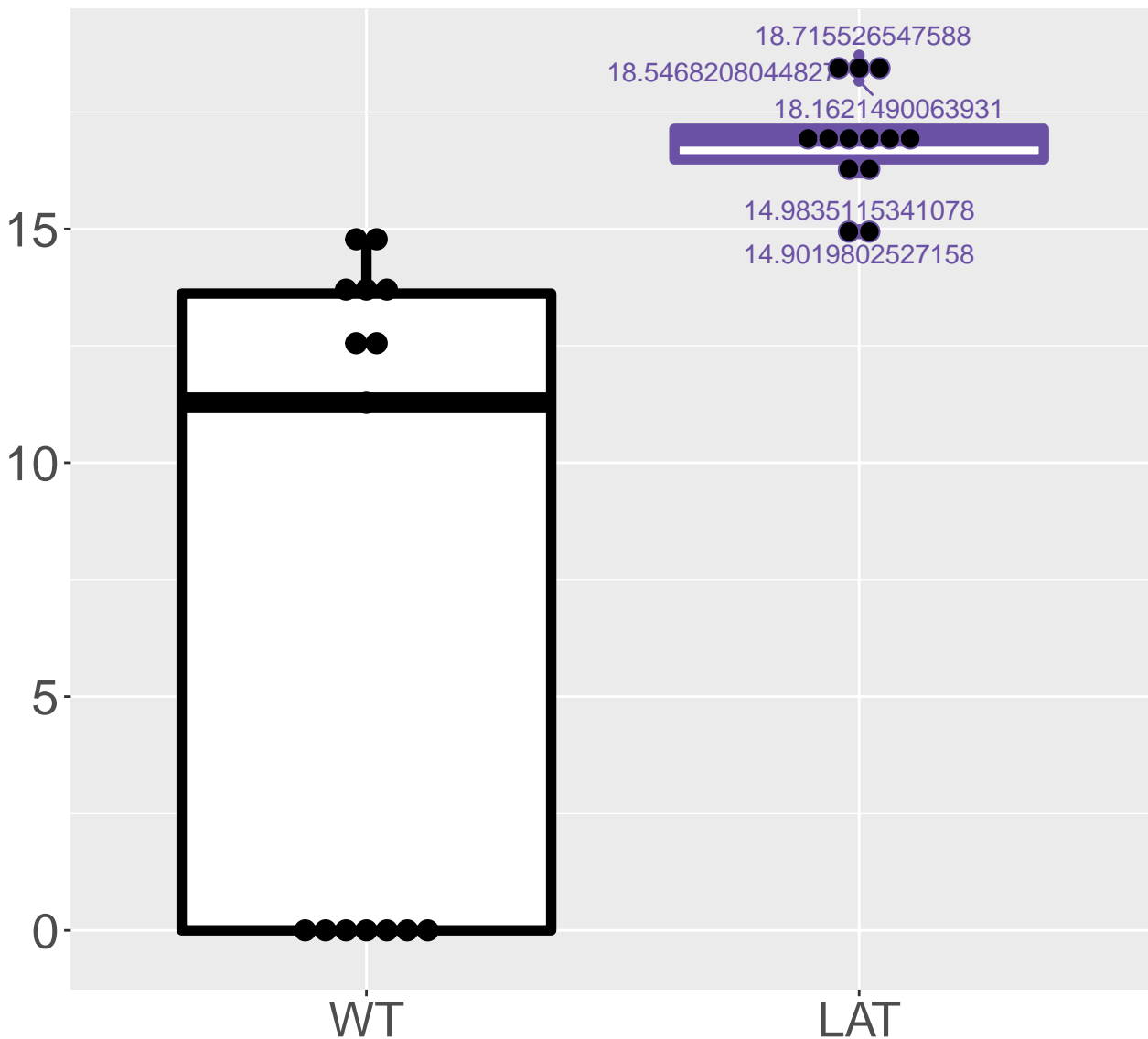
**M550.1713T578.03**

**FDR = 0.00025, FC = -0.77**



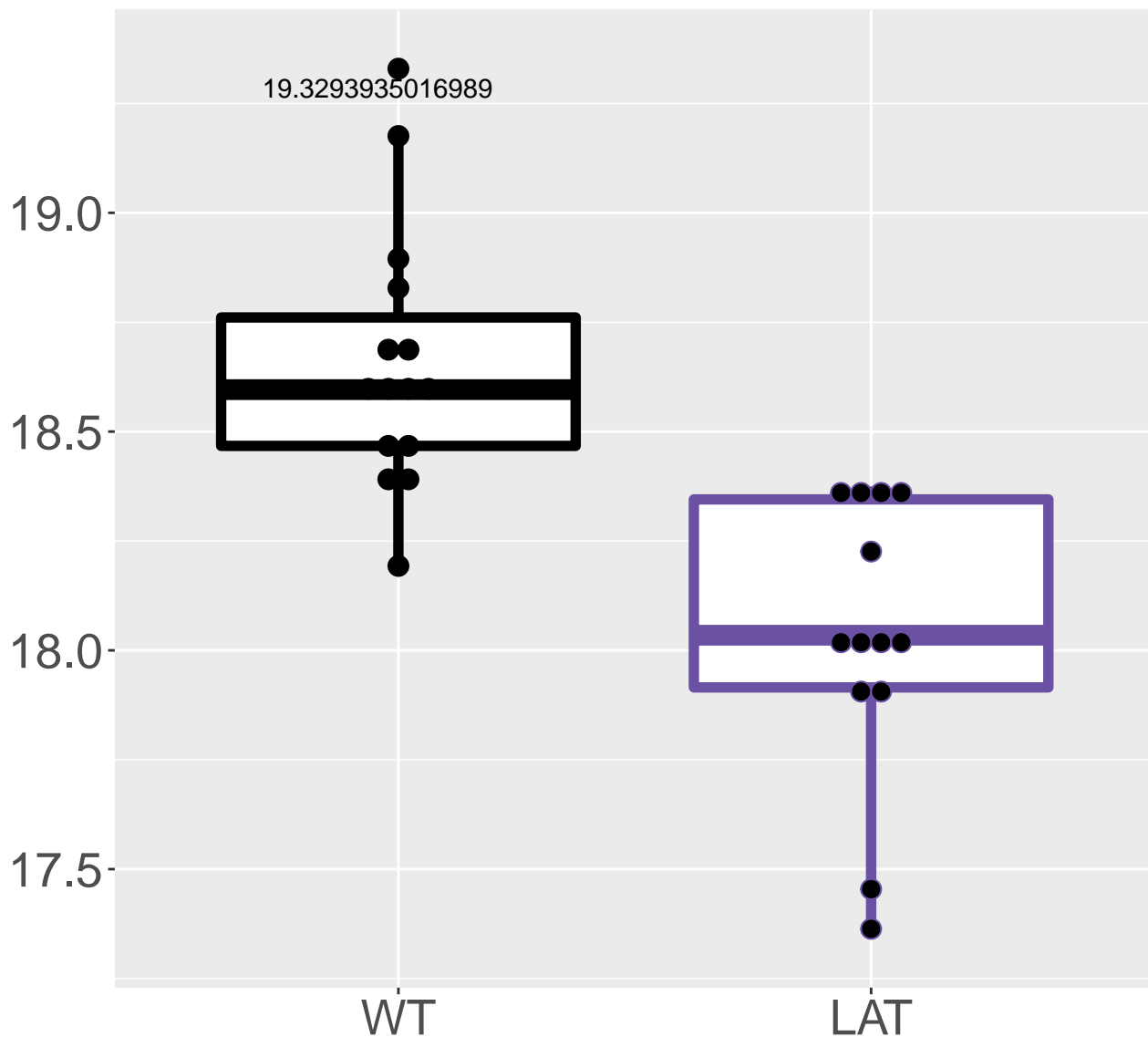


**FDR = 0.00027, FC = 9.7**



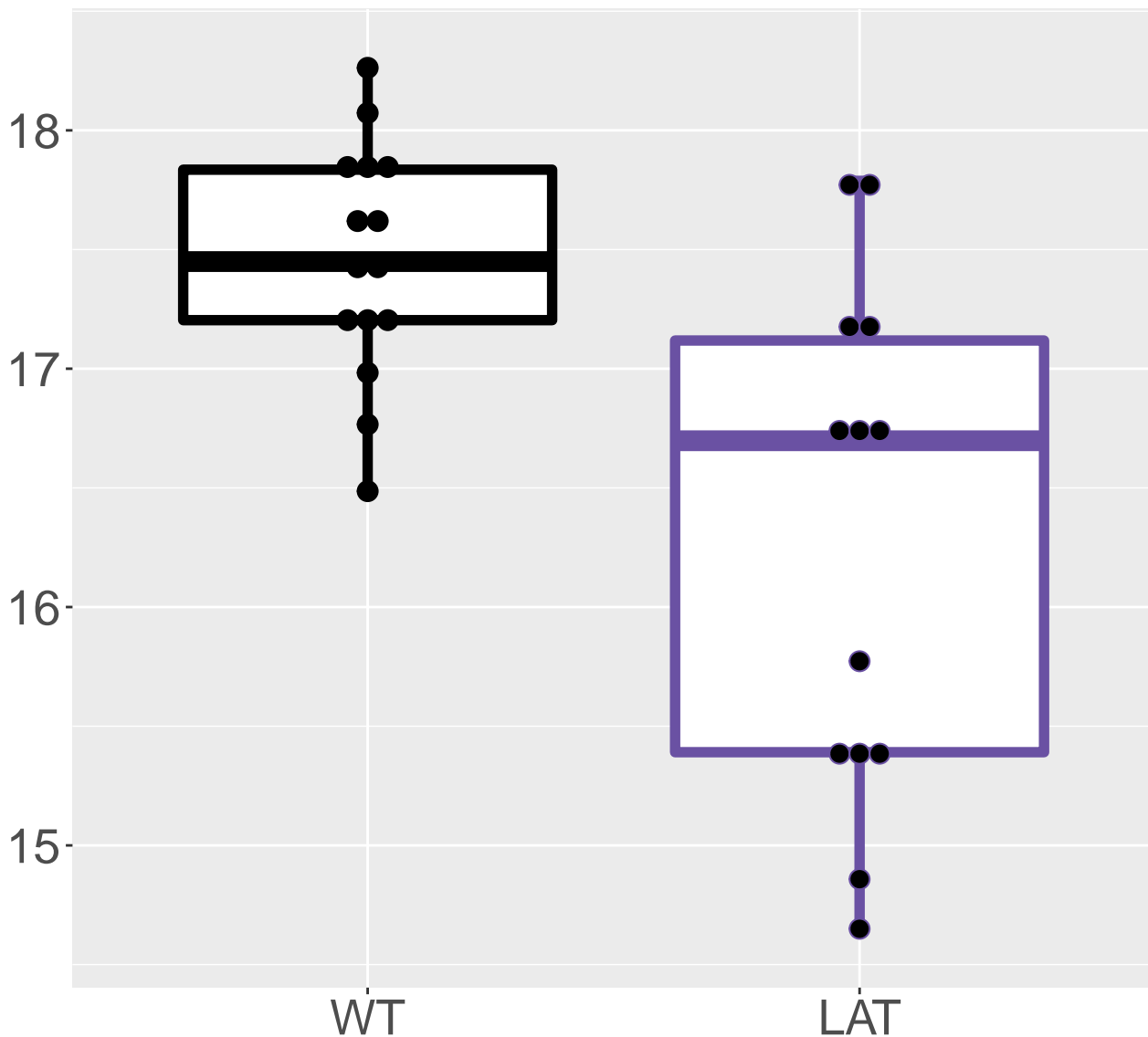
**M150.0328T387.63**

**FDR = 0.00027, FC = -0.63**

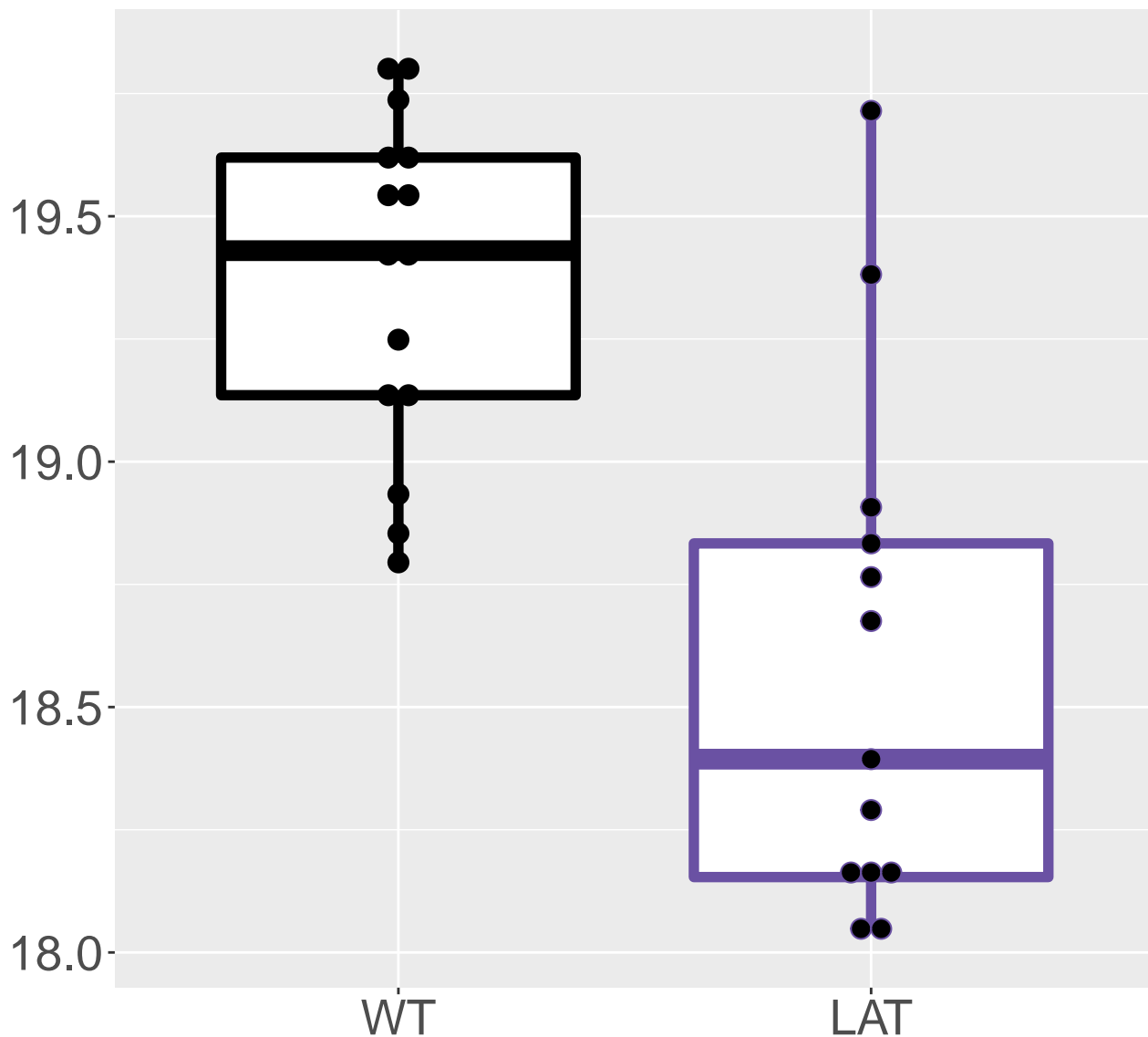


**M329.0931T140.42**

**FDR = 0.00027, FC = -1.2, sex\*\*\***

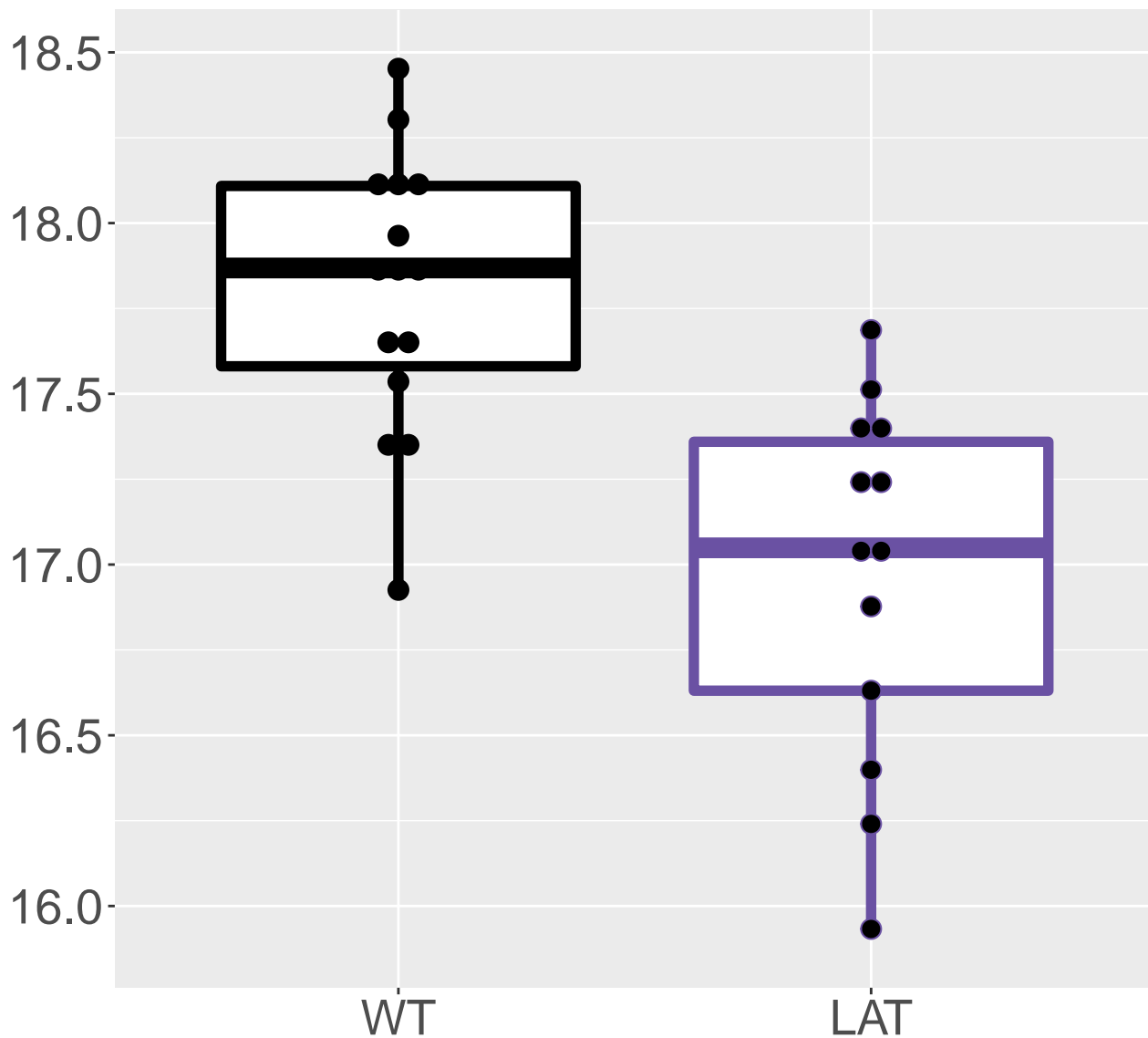


**M637.184T570.58\_1**  
**FDR = 0.00028, FC = -0.79**



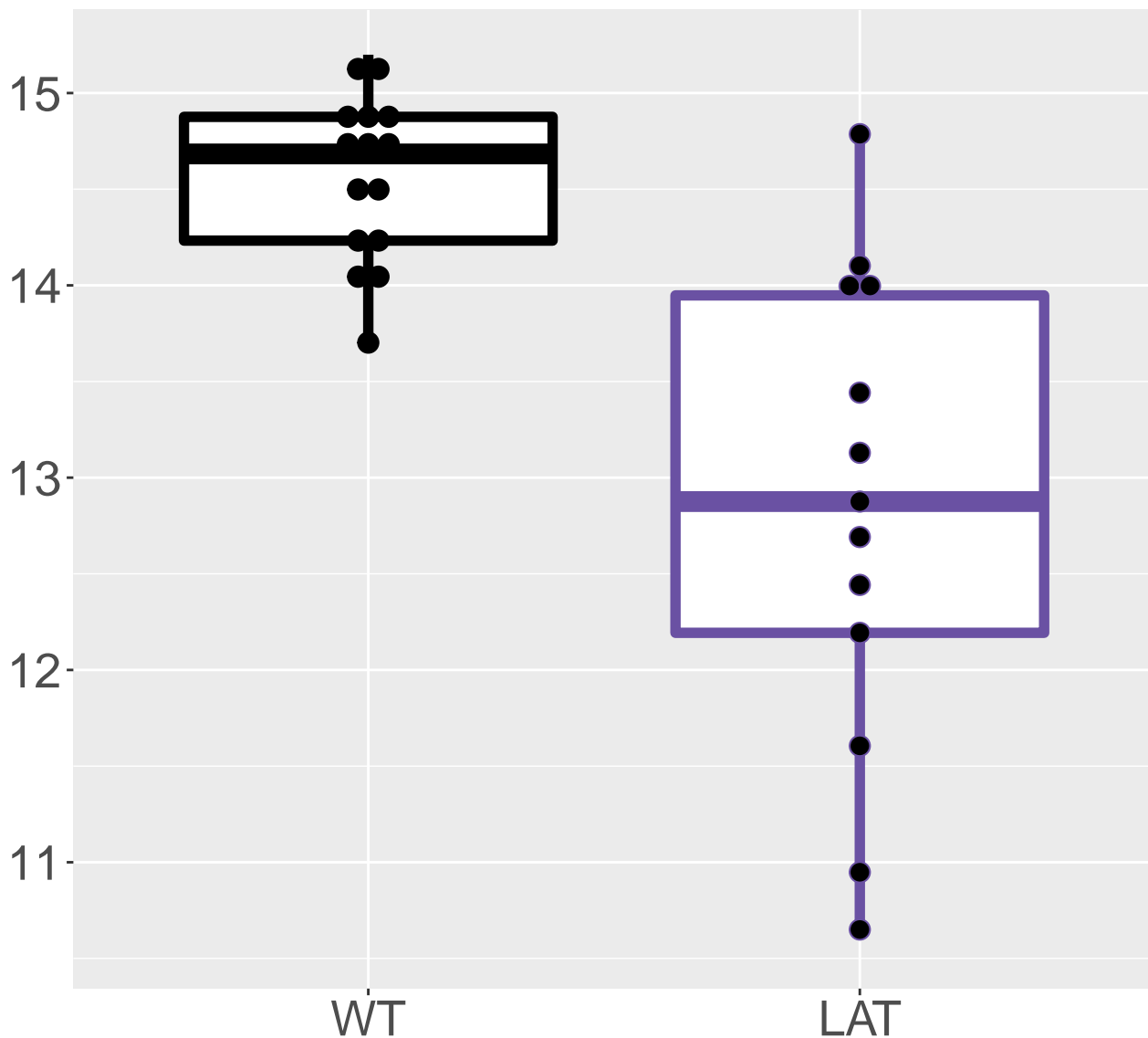
**M473.163T494.6**

**FDR = 0.00028, FC = -0.84**



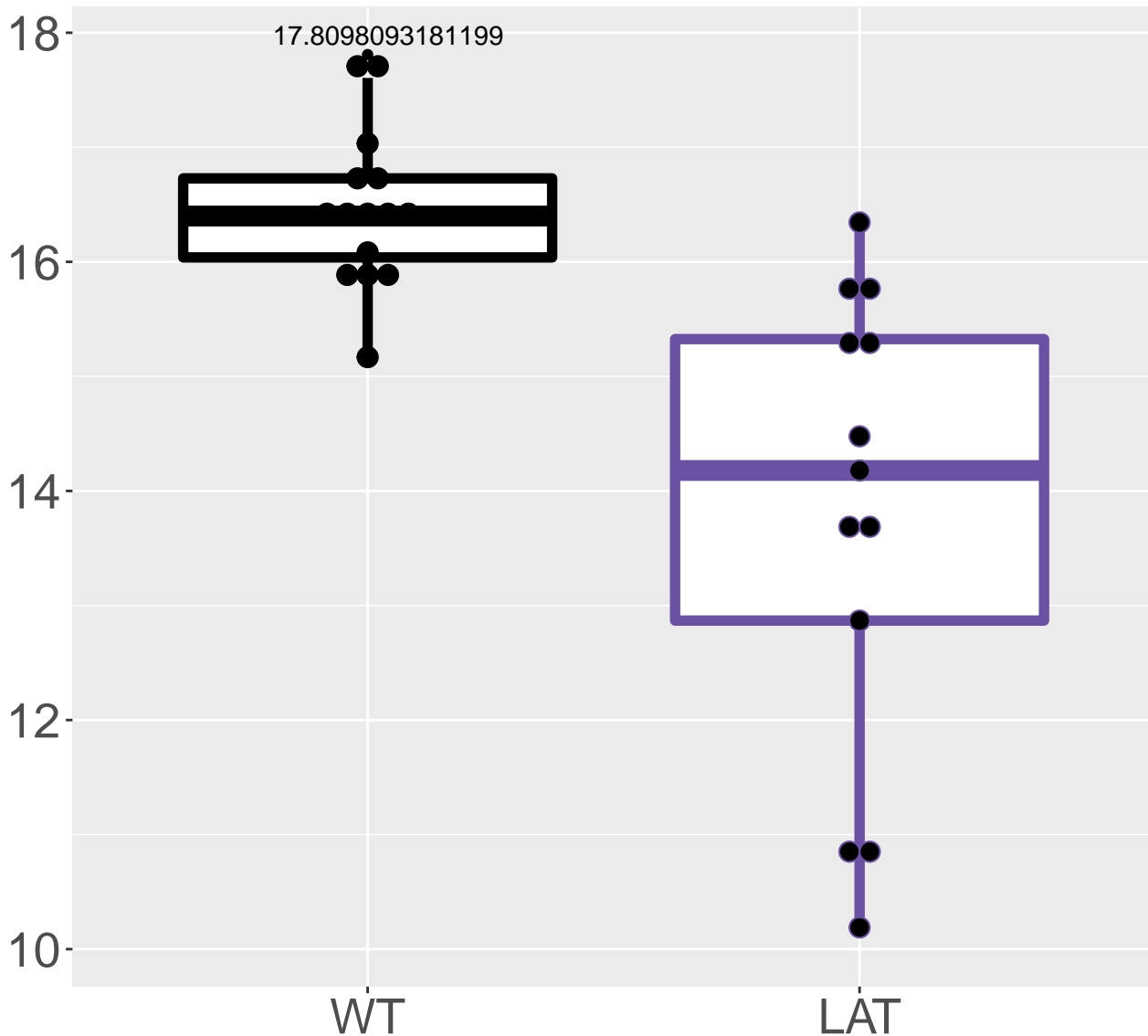
**M810.7407T589.23**

**FDR = 0.00028, FC = -1.7**

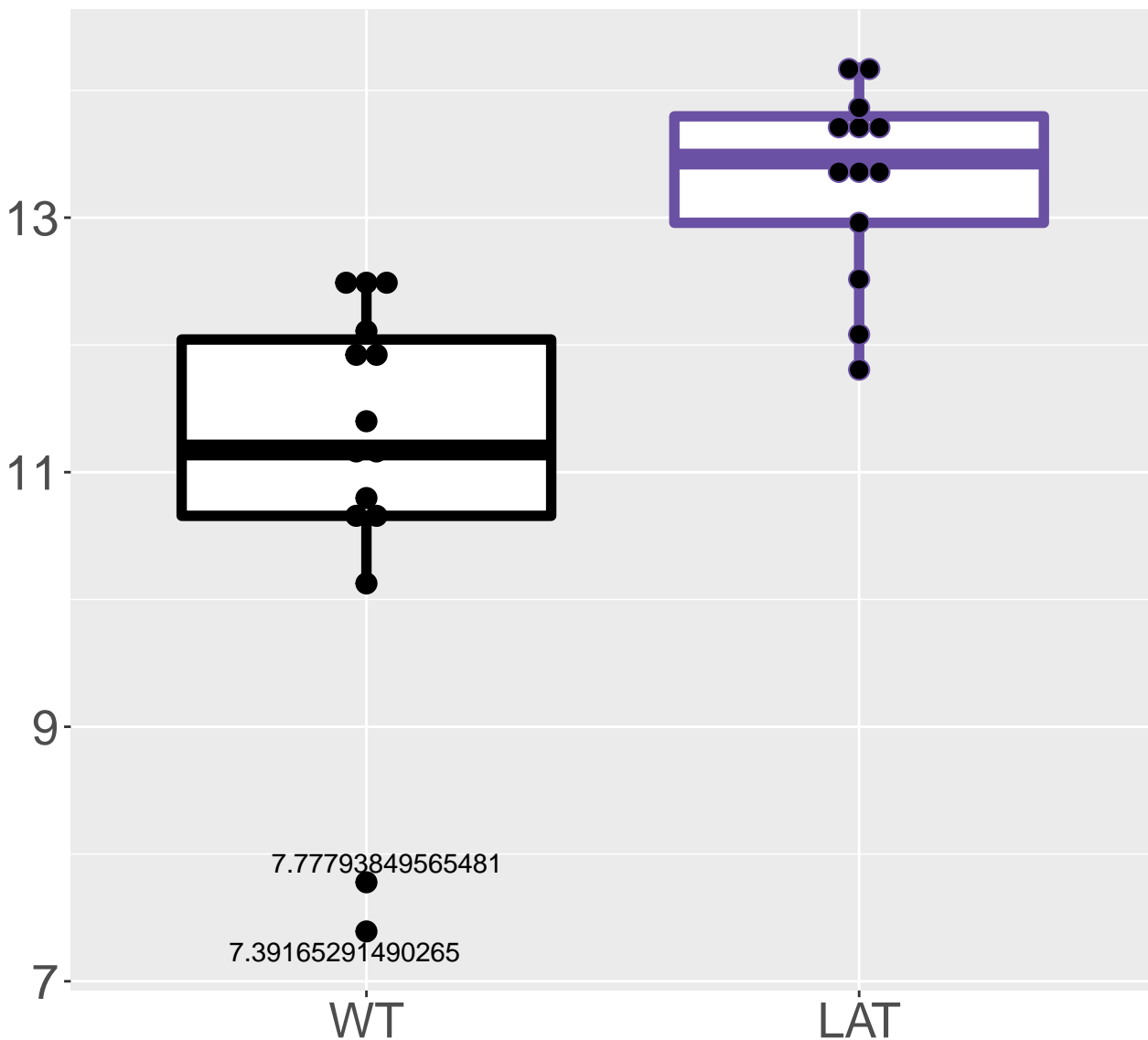


**M276.0992T173.39**

**FDR = 0.00028, FC = -2.7**



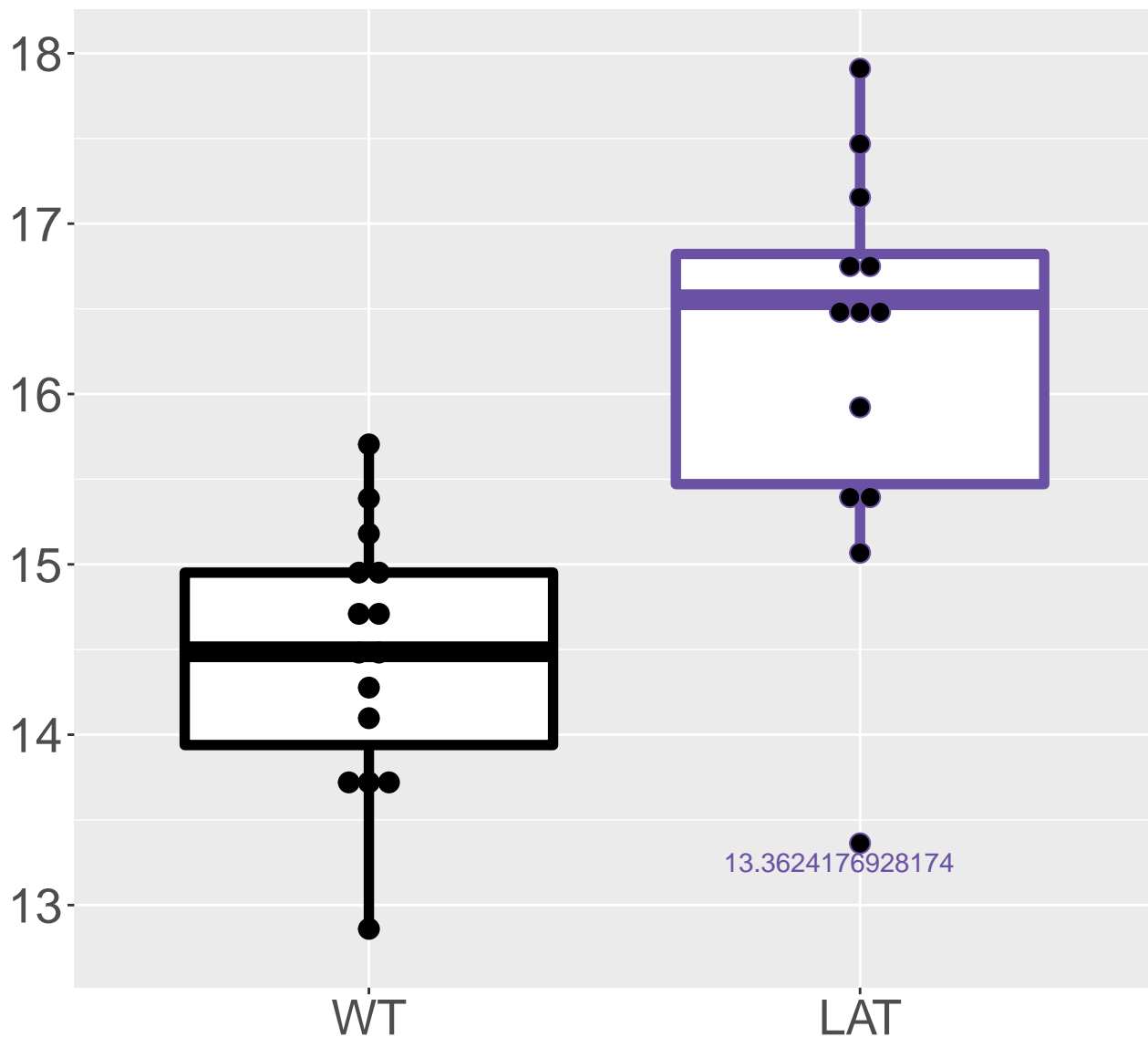
**FDR = 0.00029, FC = 2.3**





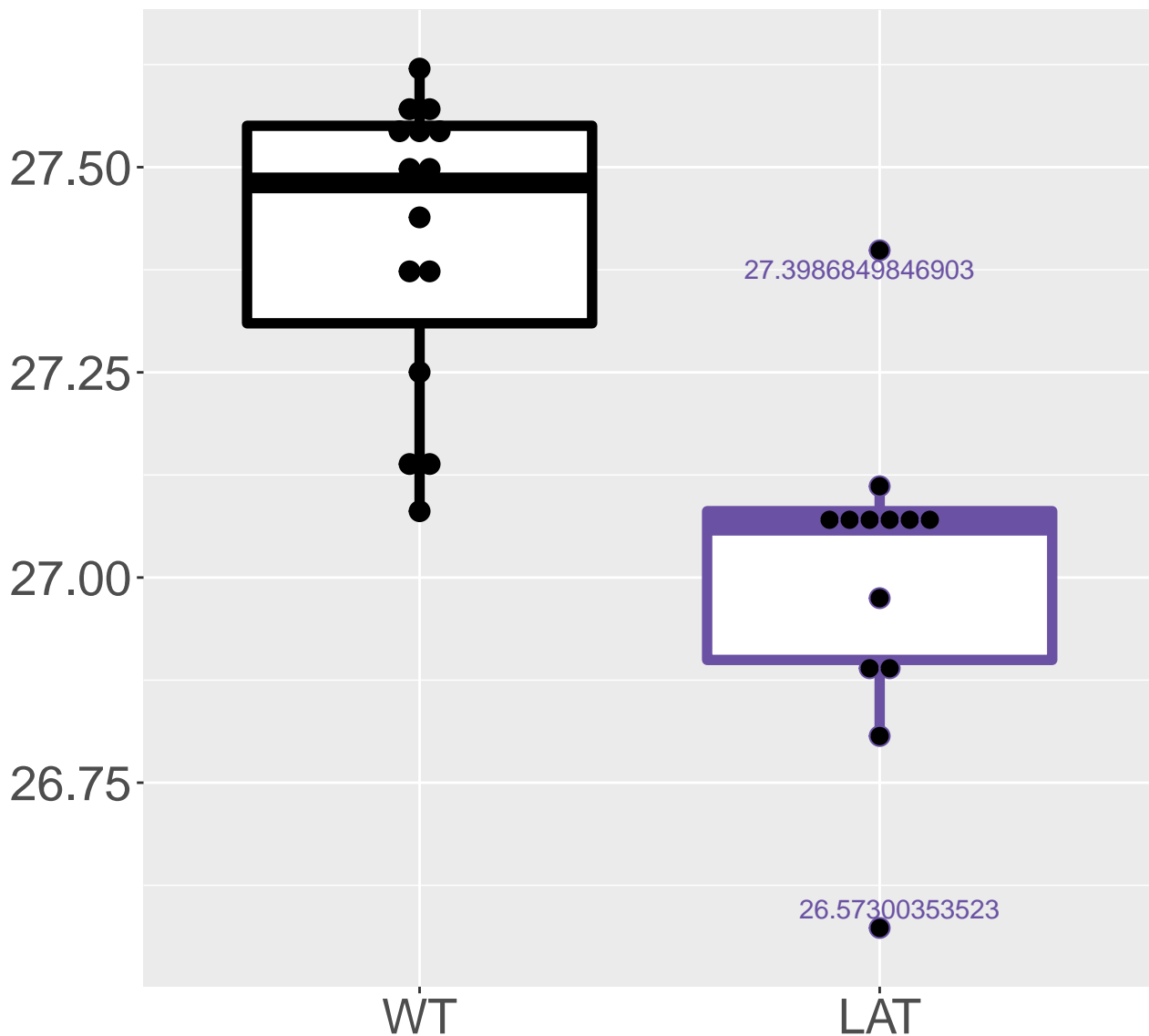
**M393.0446T556.98**

**FDR = 0.00029, FC = 1.7**



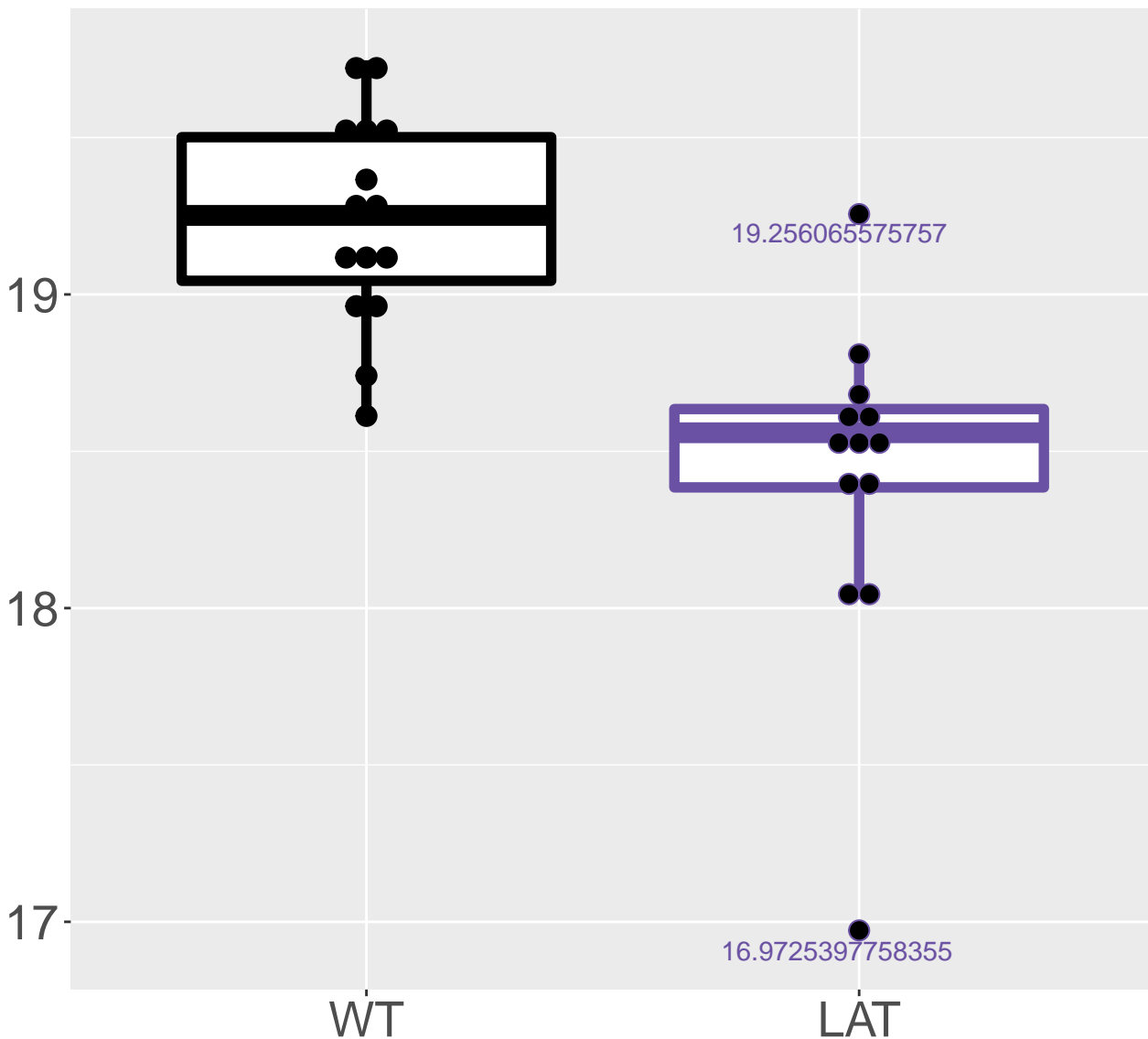
**$\hat{I}^3$ -Linolenic acid**

**FDR = 0.00029, FC = -0.41**



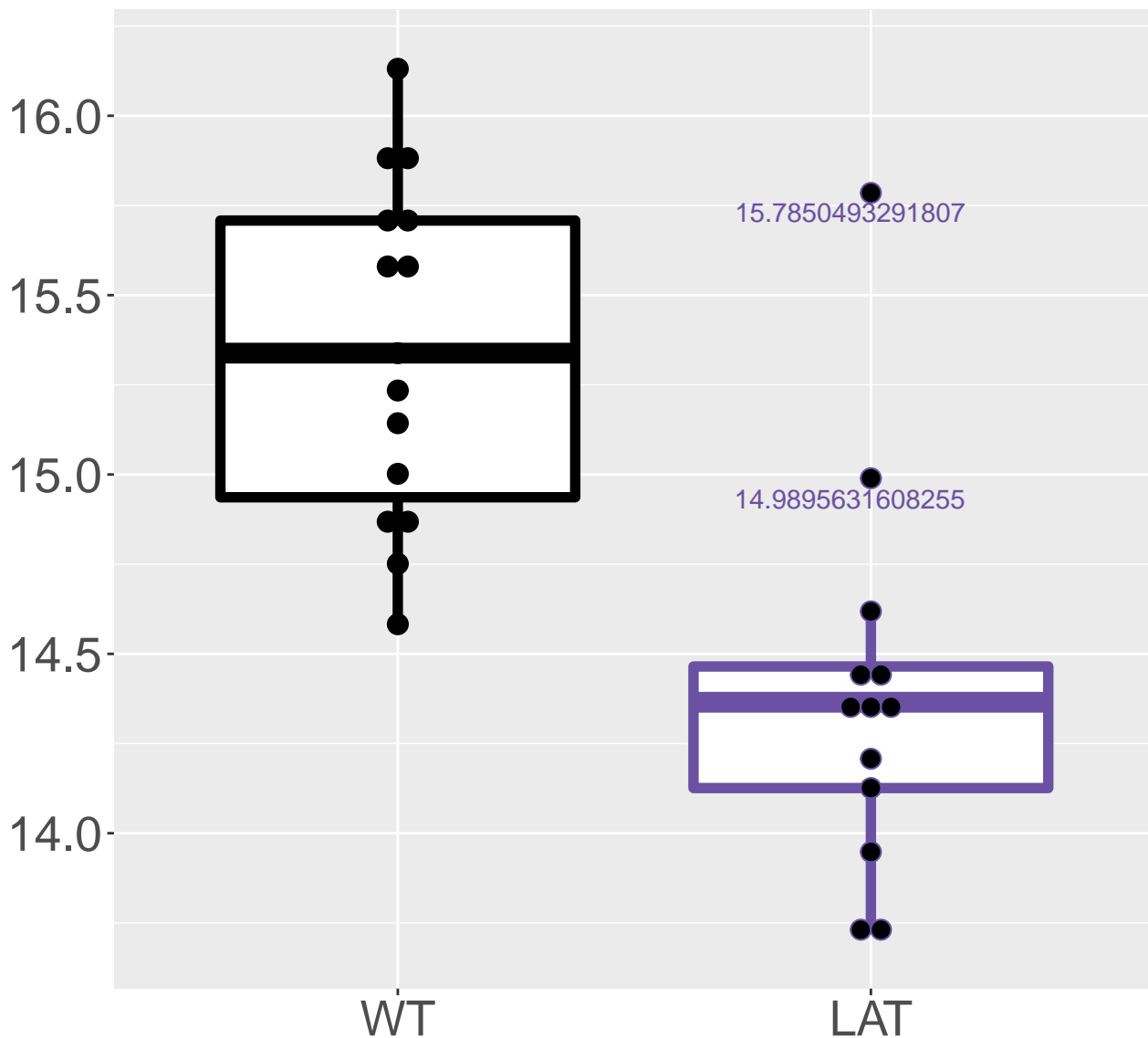
**M560.4771T77.98**

**FDR = 0.00029, FC = -0.82**



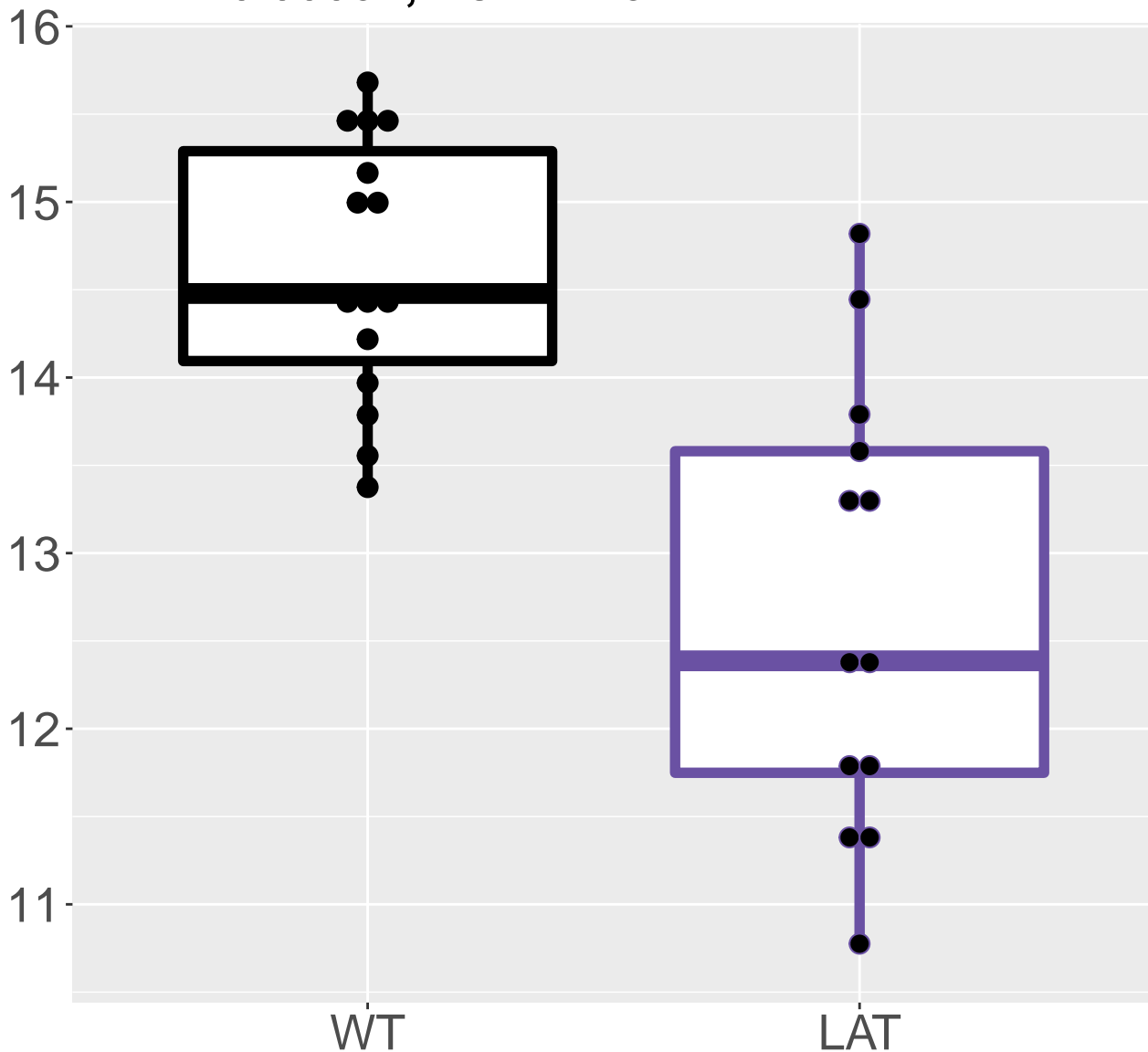
**M495.6617T639.62**

**FDR =  $3e-04$ , FC =  $-0.96$**



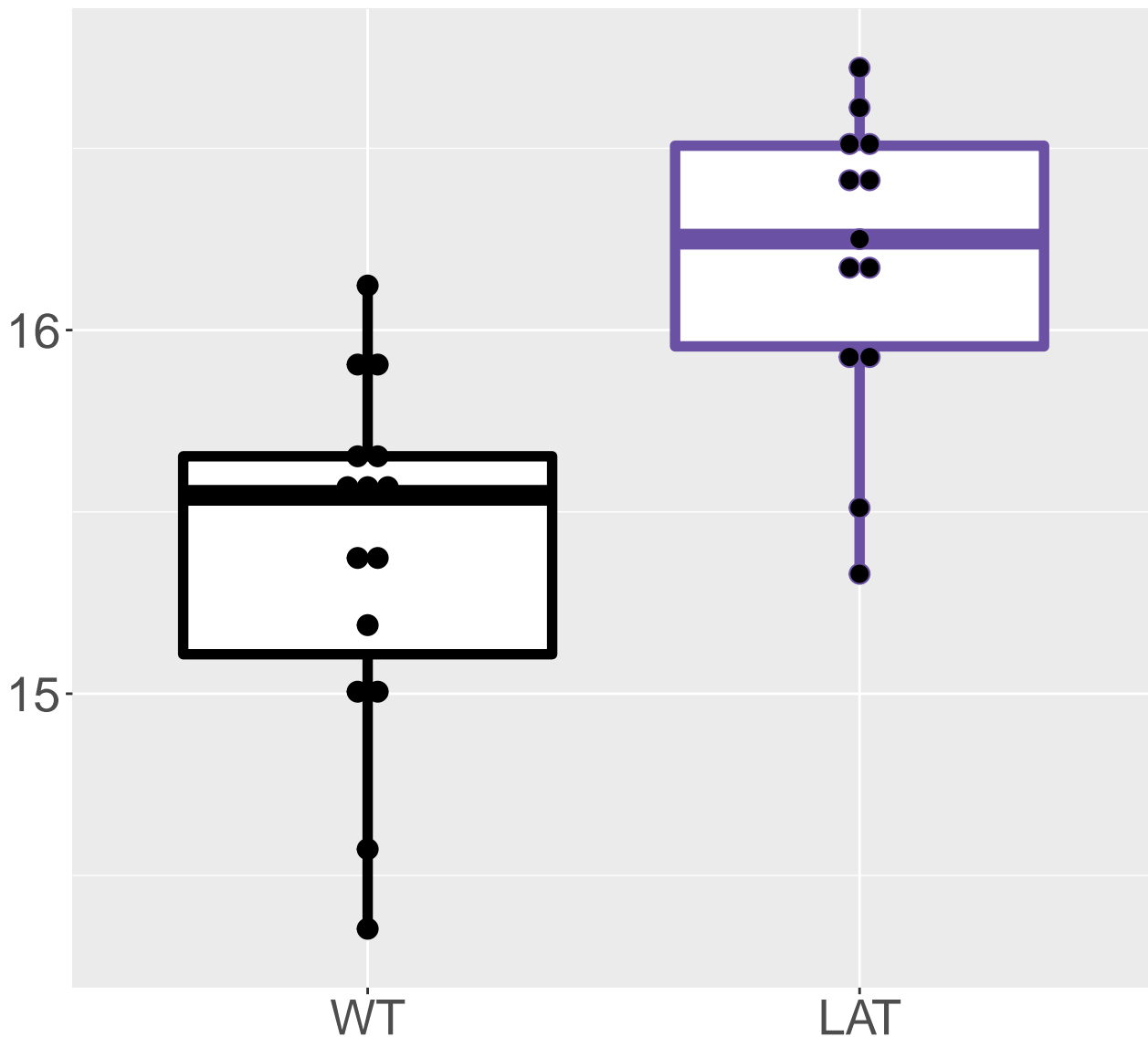
**M777.2424T620.32**

**FDR = 0.00031, FC = -1.9**



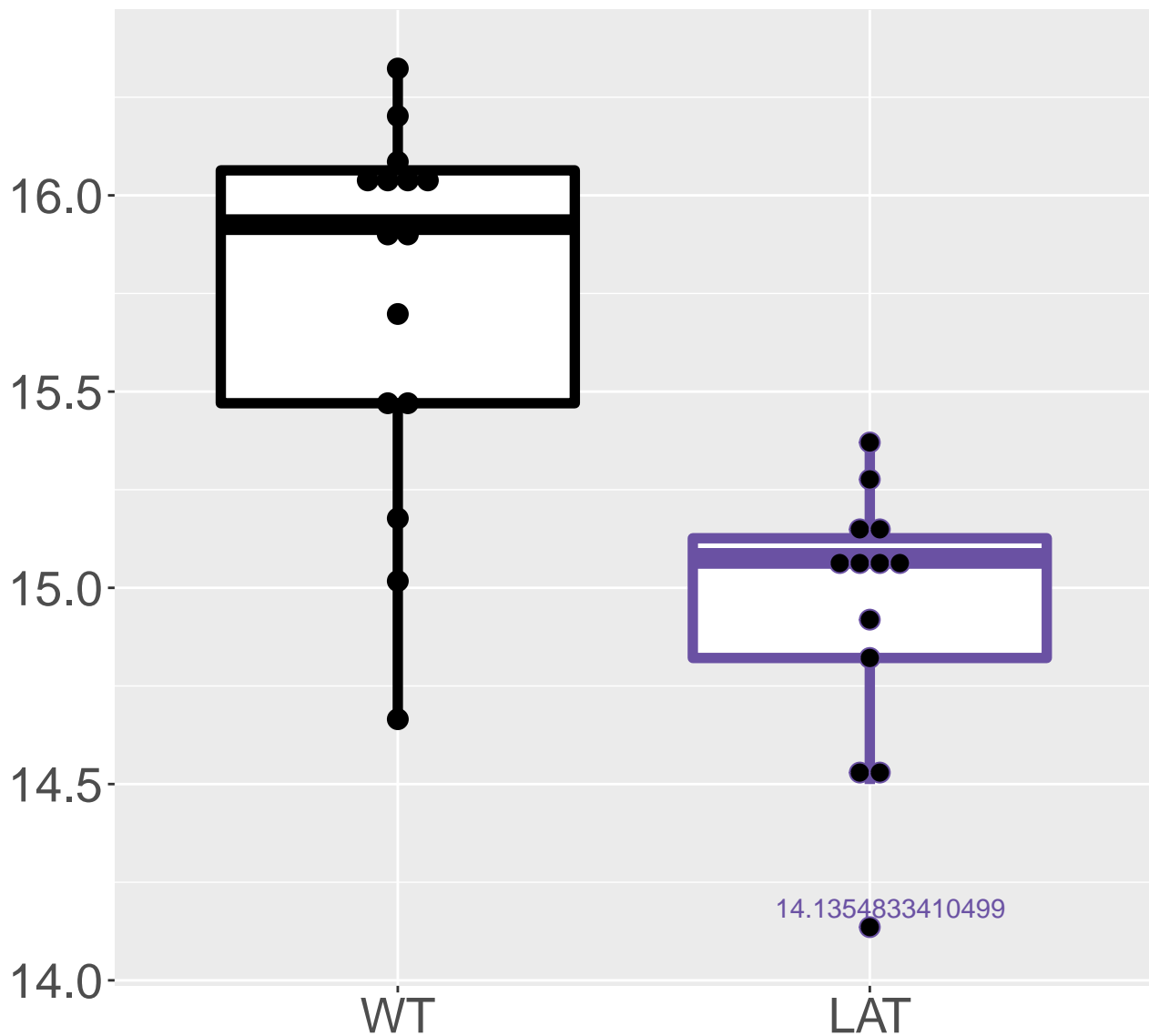
**M224.0567T396.42**

**FDR = 0.00031, FC = 0.8**



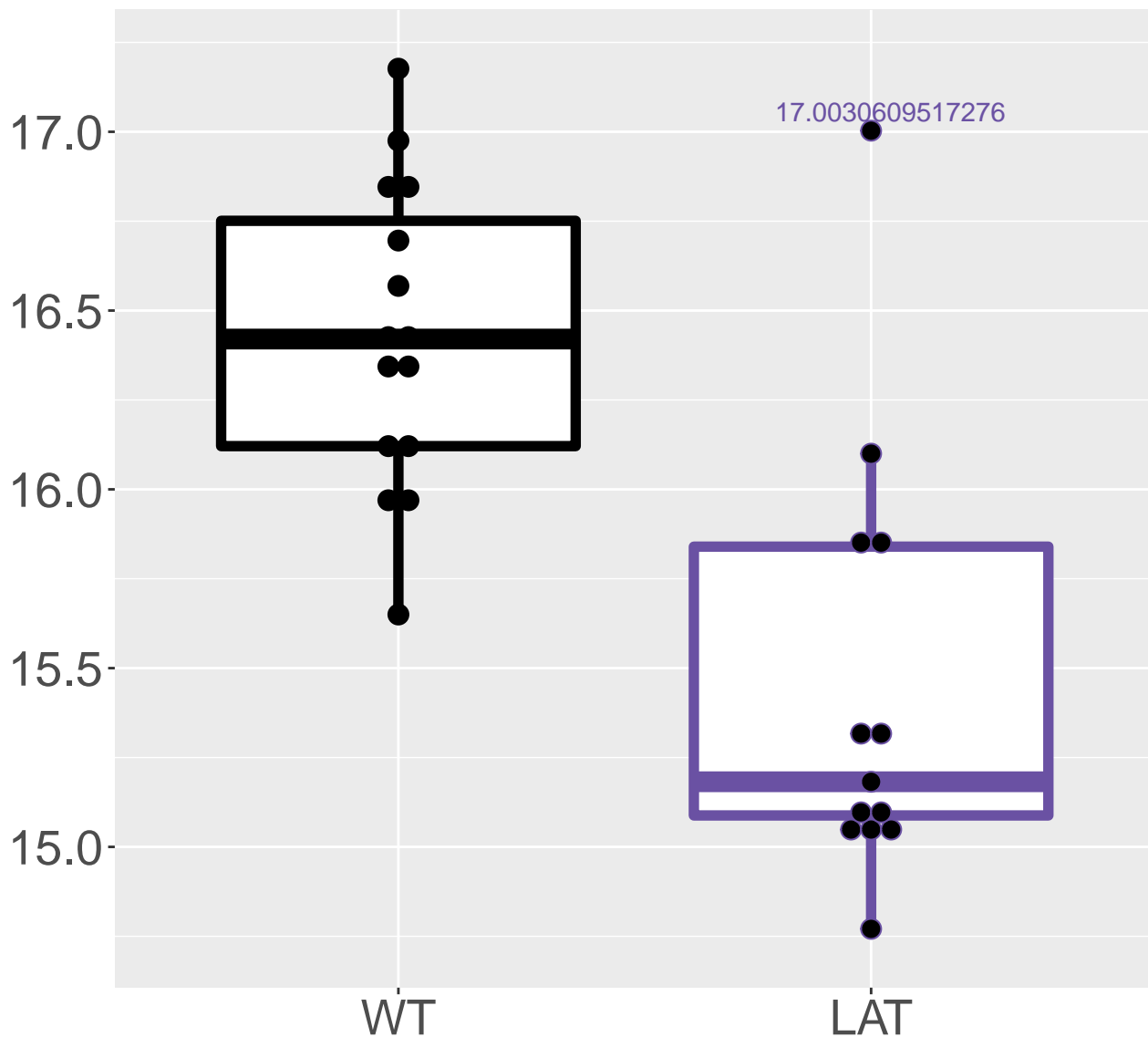
**M710.7036T622.59**

**FDR = 0.00033, FC = -0.8**



**M819.7669T675.72\_1**

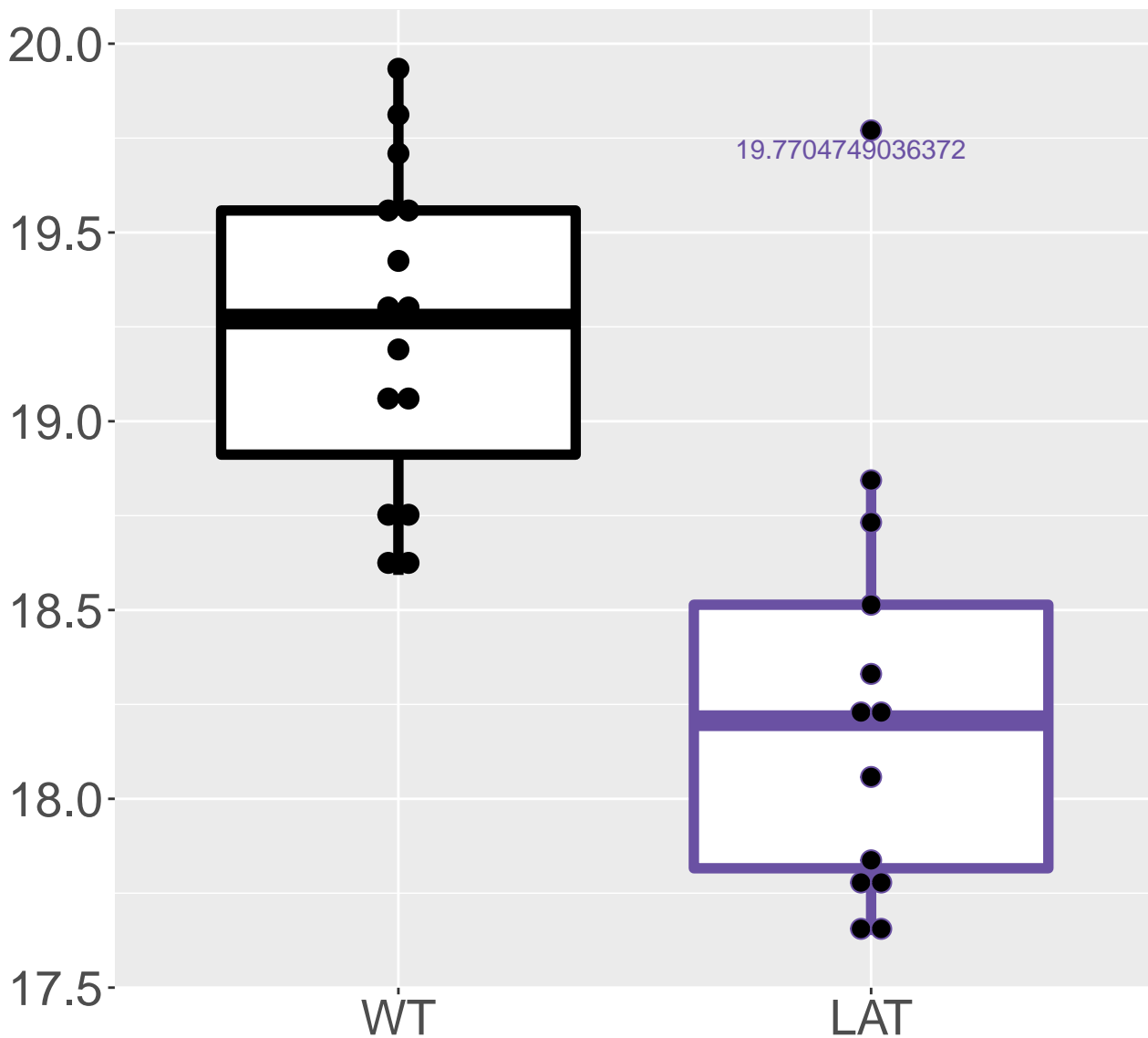
**FDR = 0.00034, FC = -0.99**





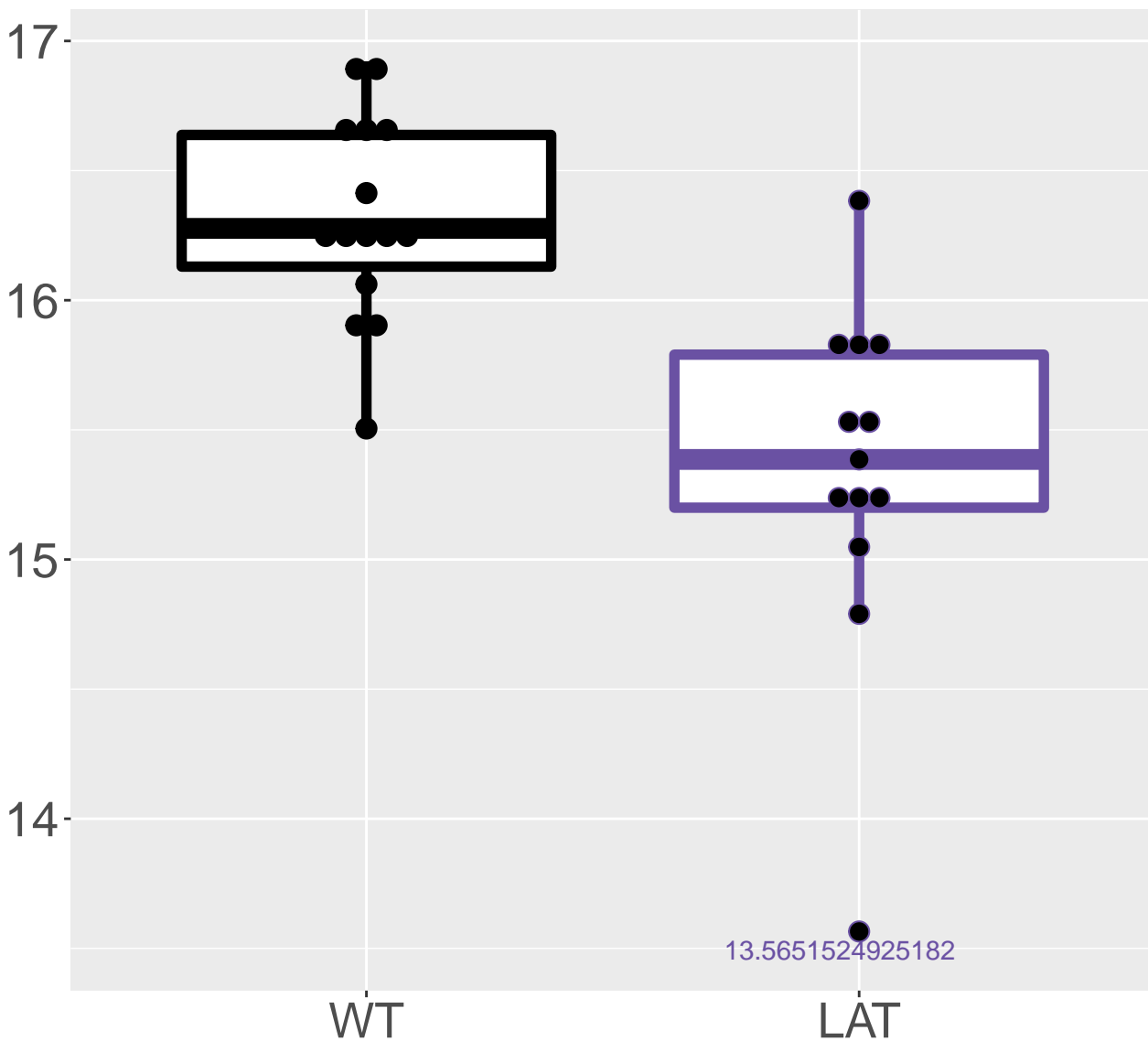
**M656.2099T659.97**

**FDR = 0.00034, FC = -0.98**



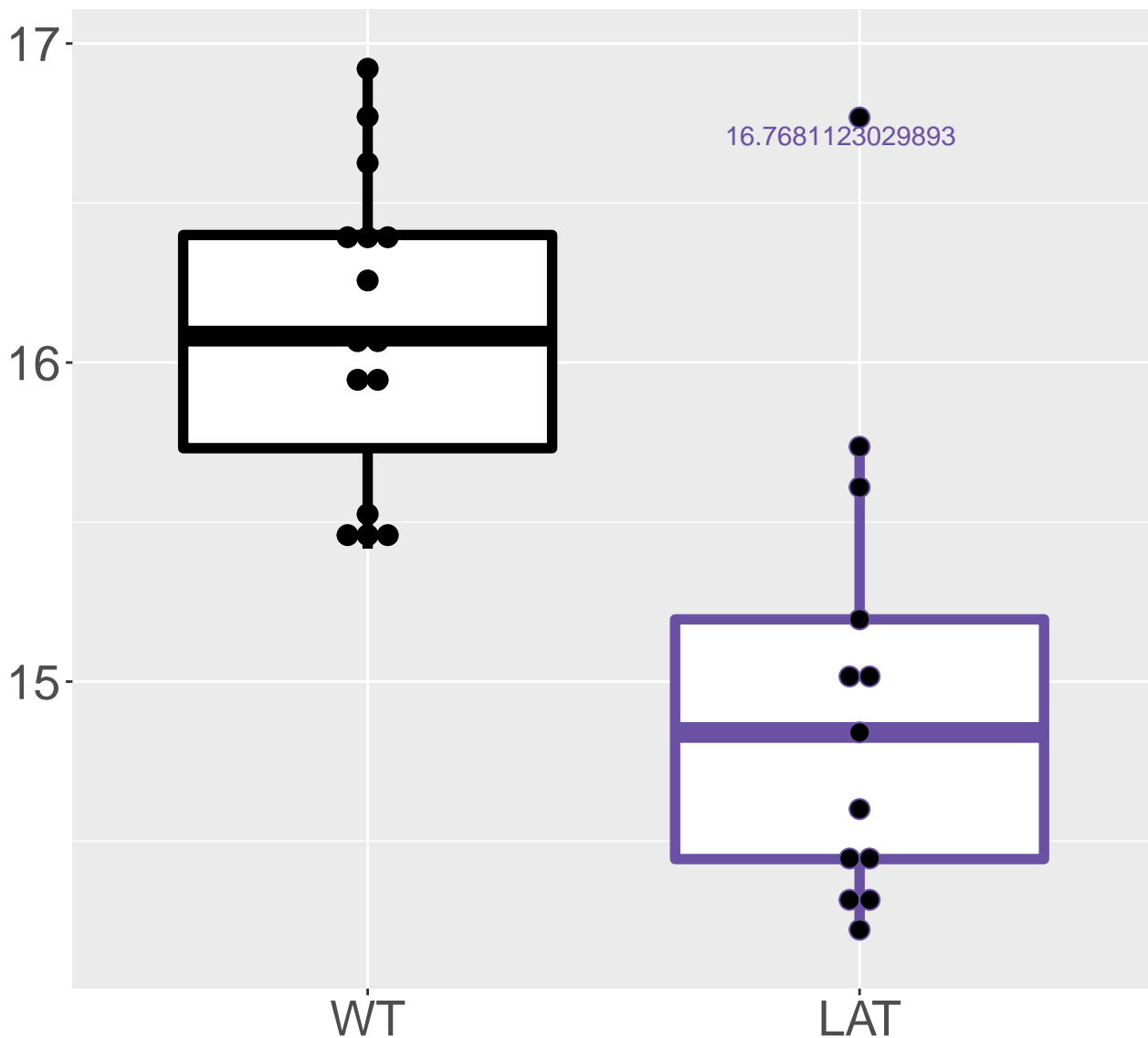
**M881.7601T619.51**

**FDR = 0.00034, FC = -0.98**



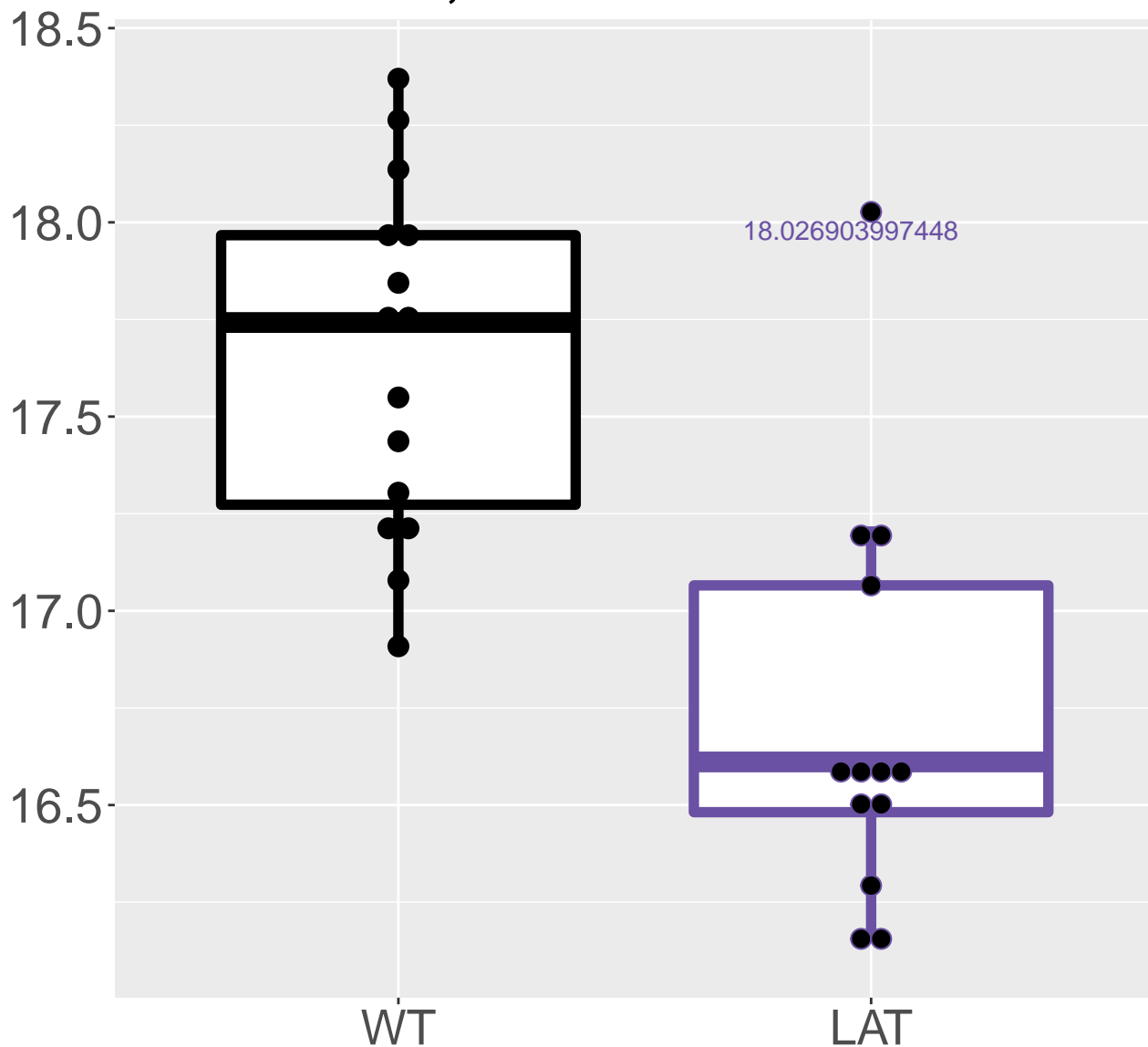
**M686.7179T659.83\_1**

**FDR = 0.00034, FC = -1.1**



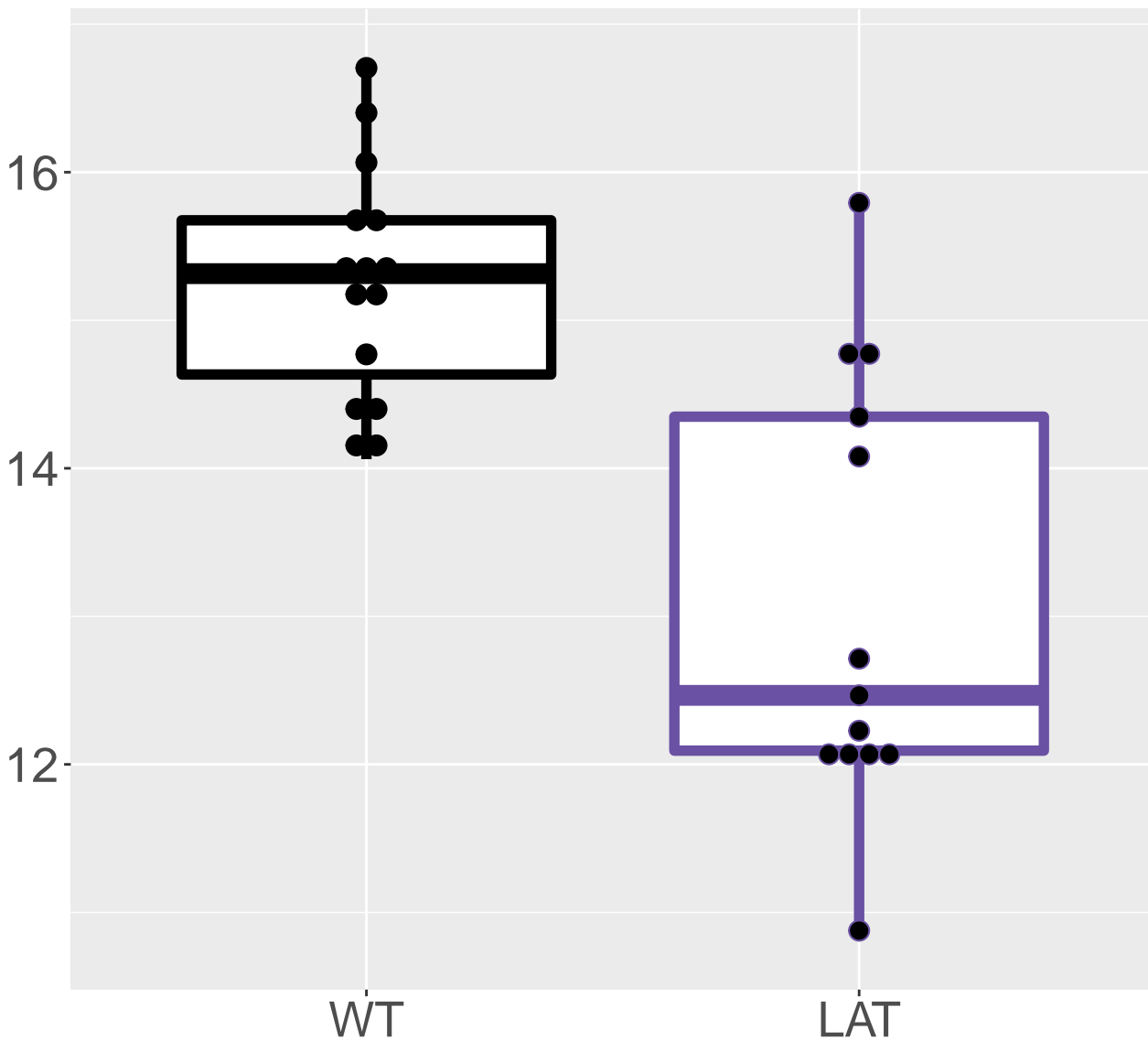
**M605.6917T649.66\_1**

**FDR = 0.00034, FC = -0.92**



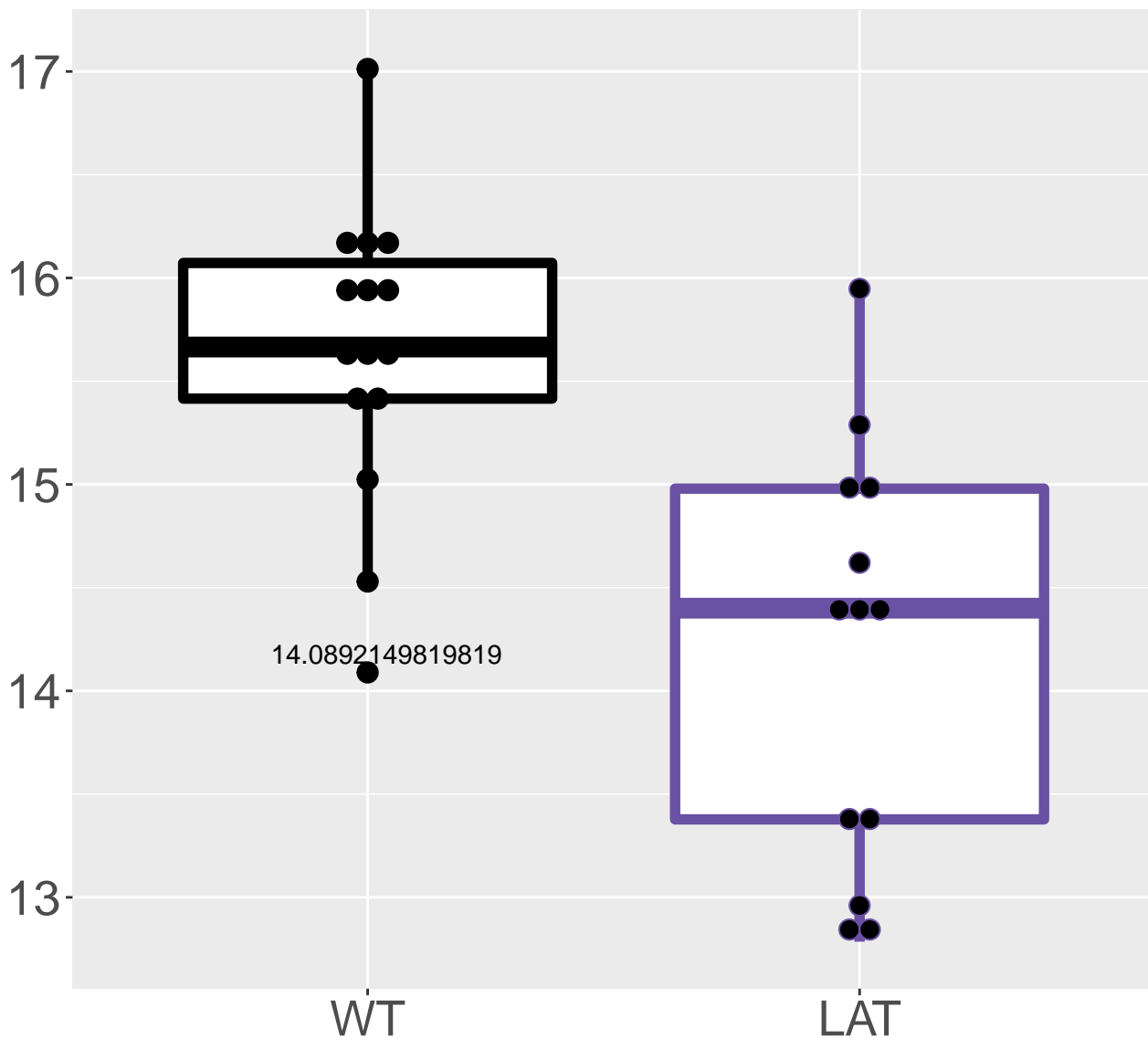
**M444.1728T485.3**

**FDR = 0.00034, FC = -2.2**

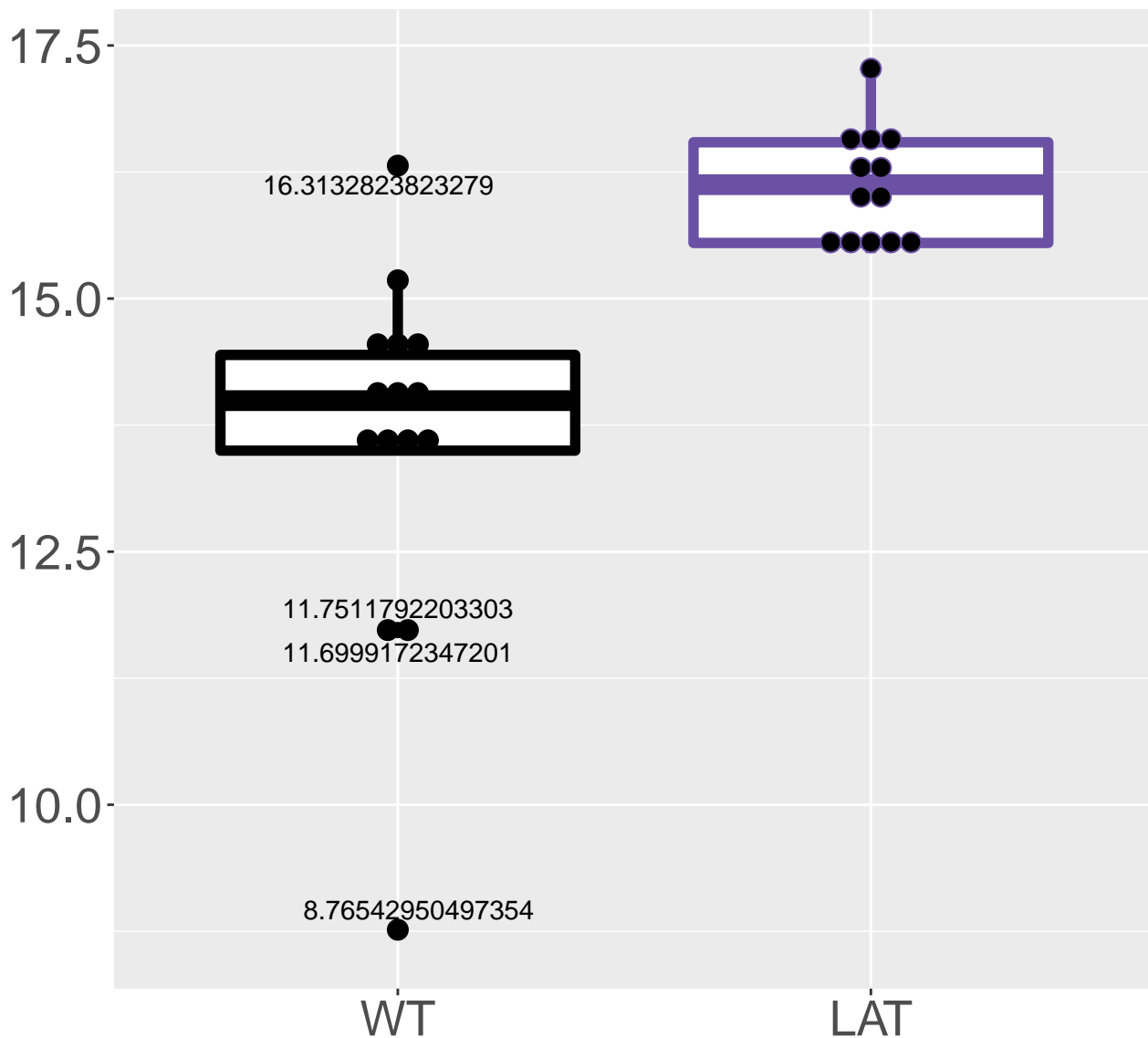


**M289.07T400.09**

**FDR = 0.00034, FC = -1.5**

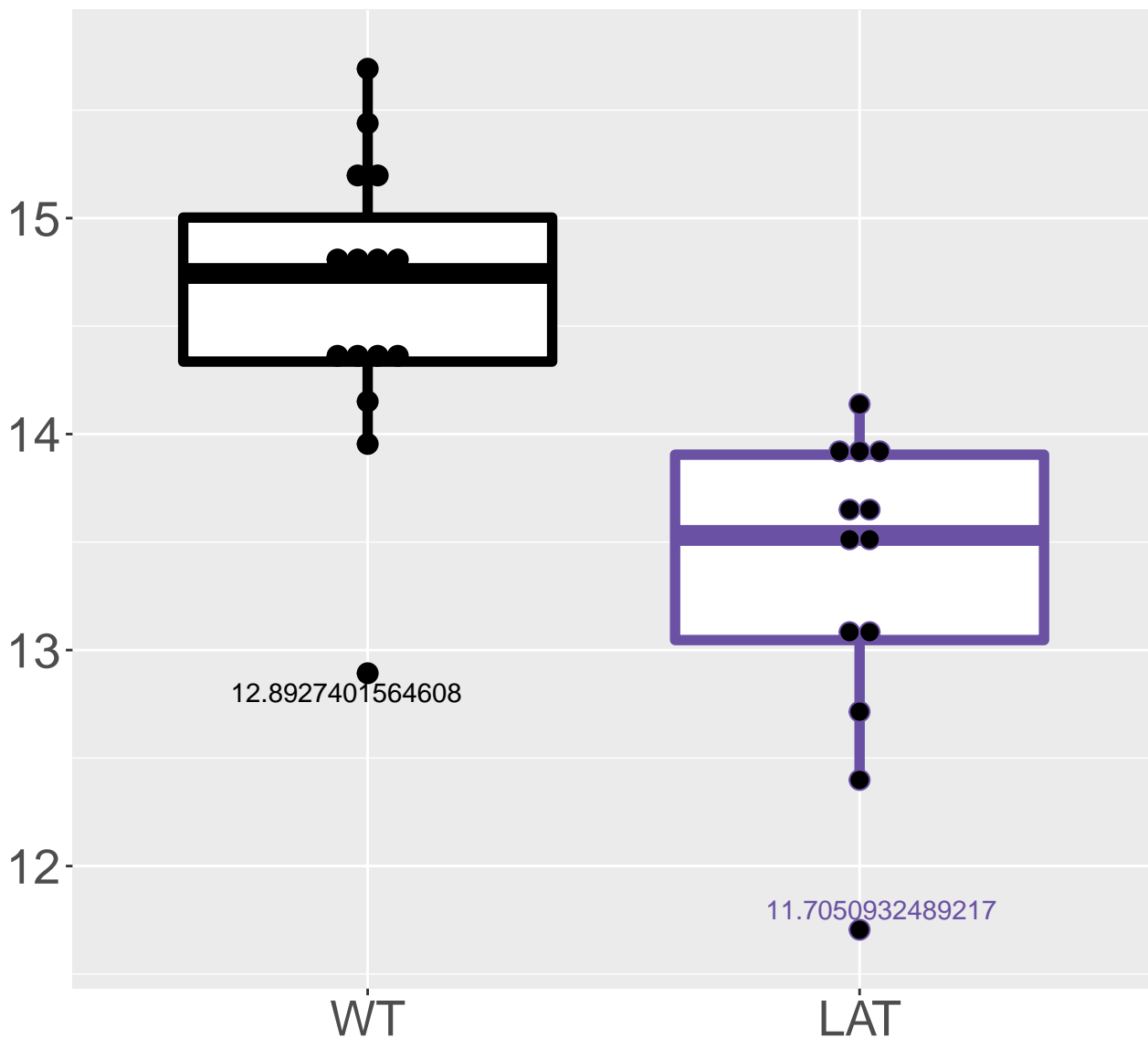


**M273.1096T392.08**  
**FDR = 0.00035, FC = 2.5**



**M653.1748T371.07**

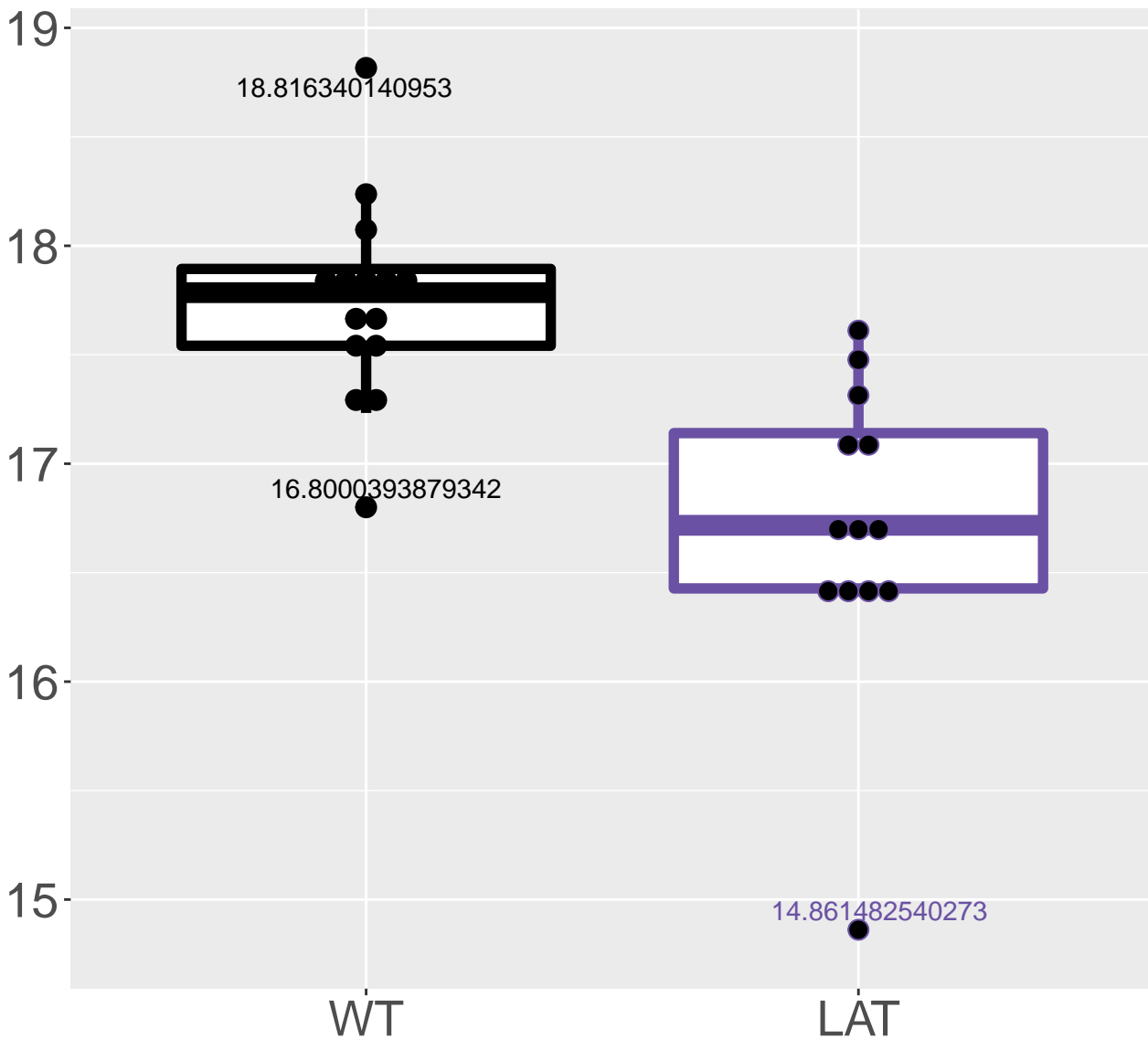
**FDR = 0.00036, FC = -1.3**





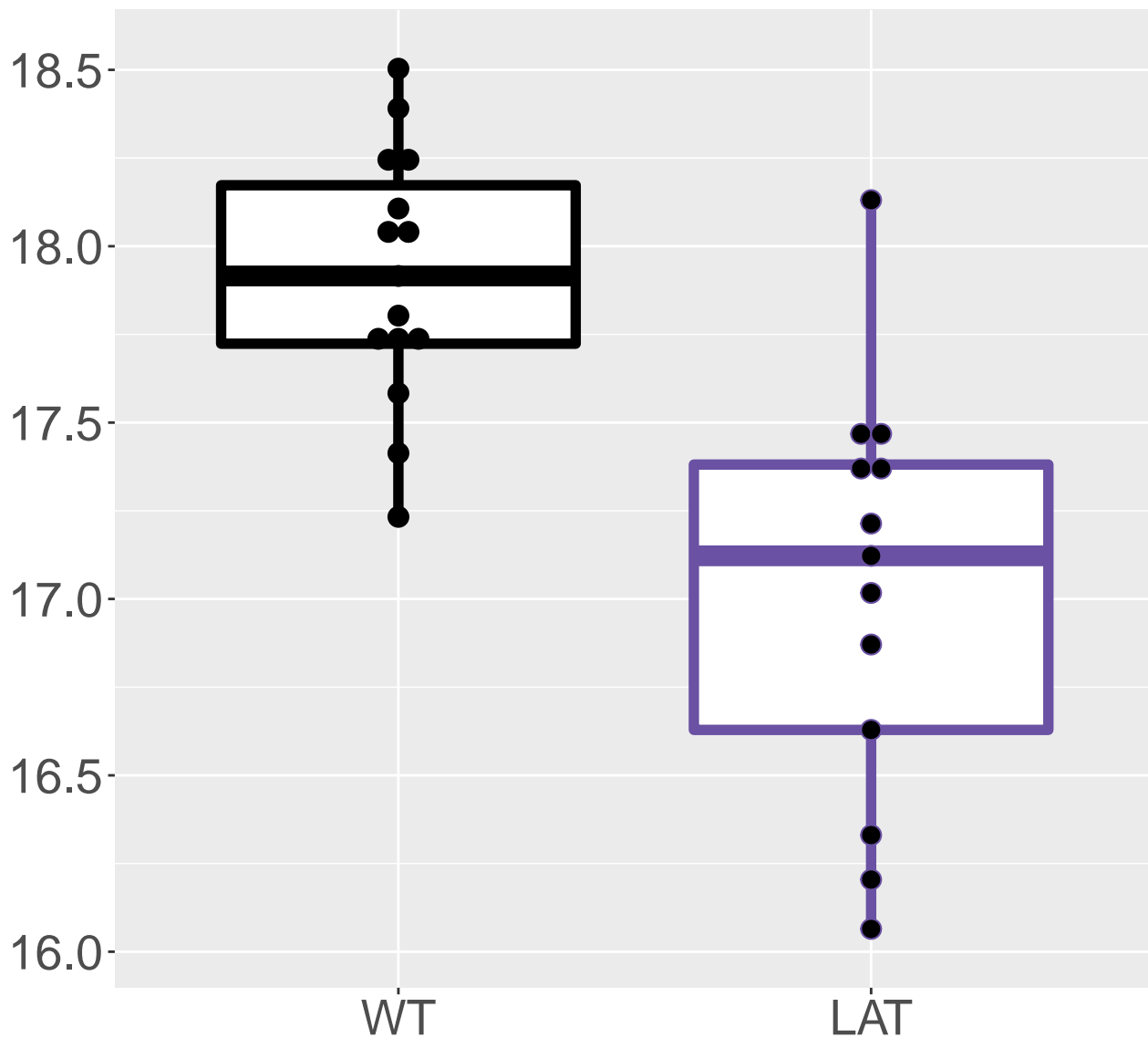
# M511.2513T208.73

**FDR = 0.00036, FC = -1**



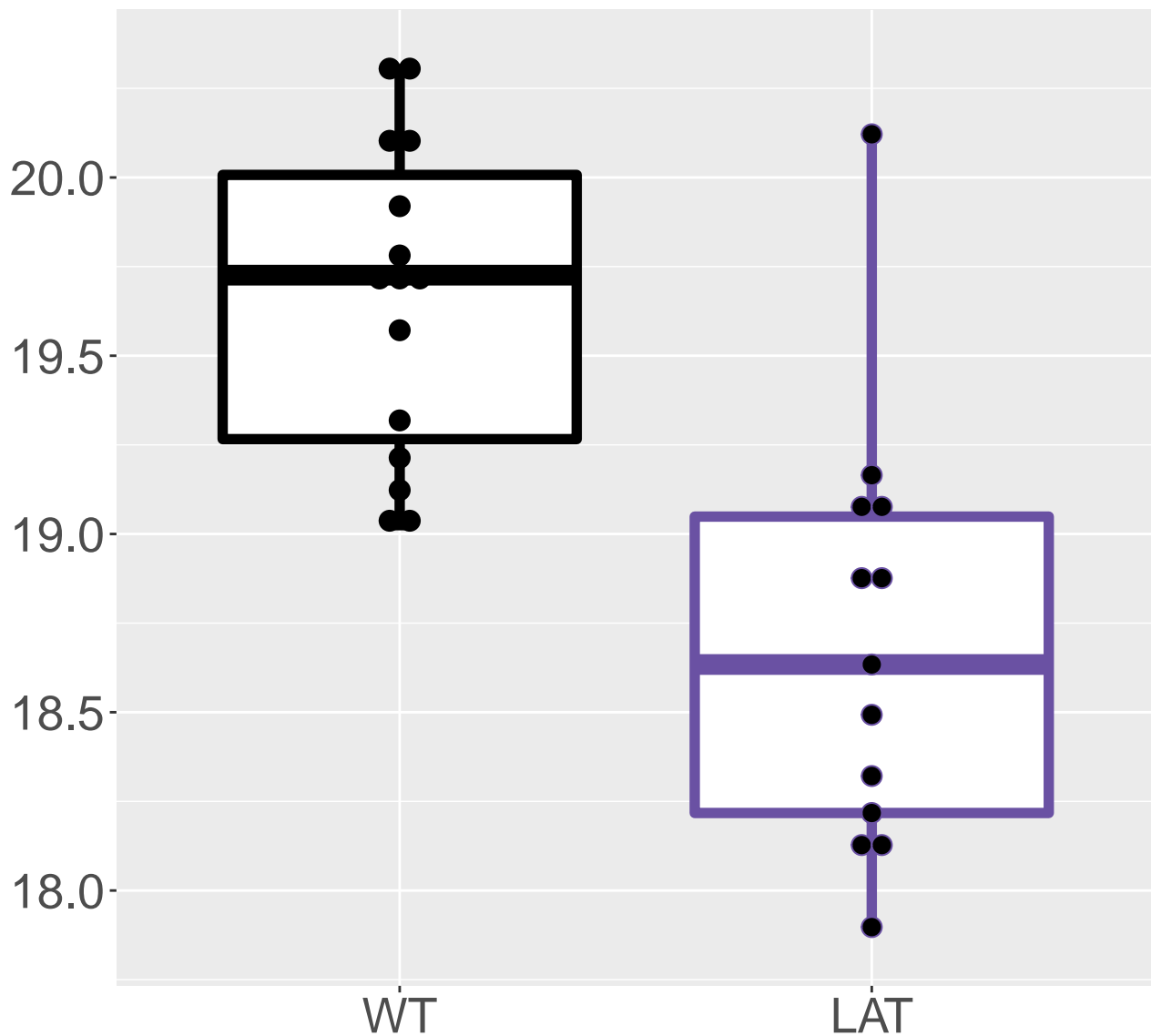
**M714.1997T602.17**

**FDR = 0.00036, FC = -0.9**



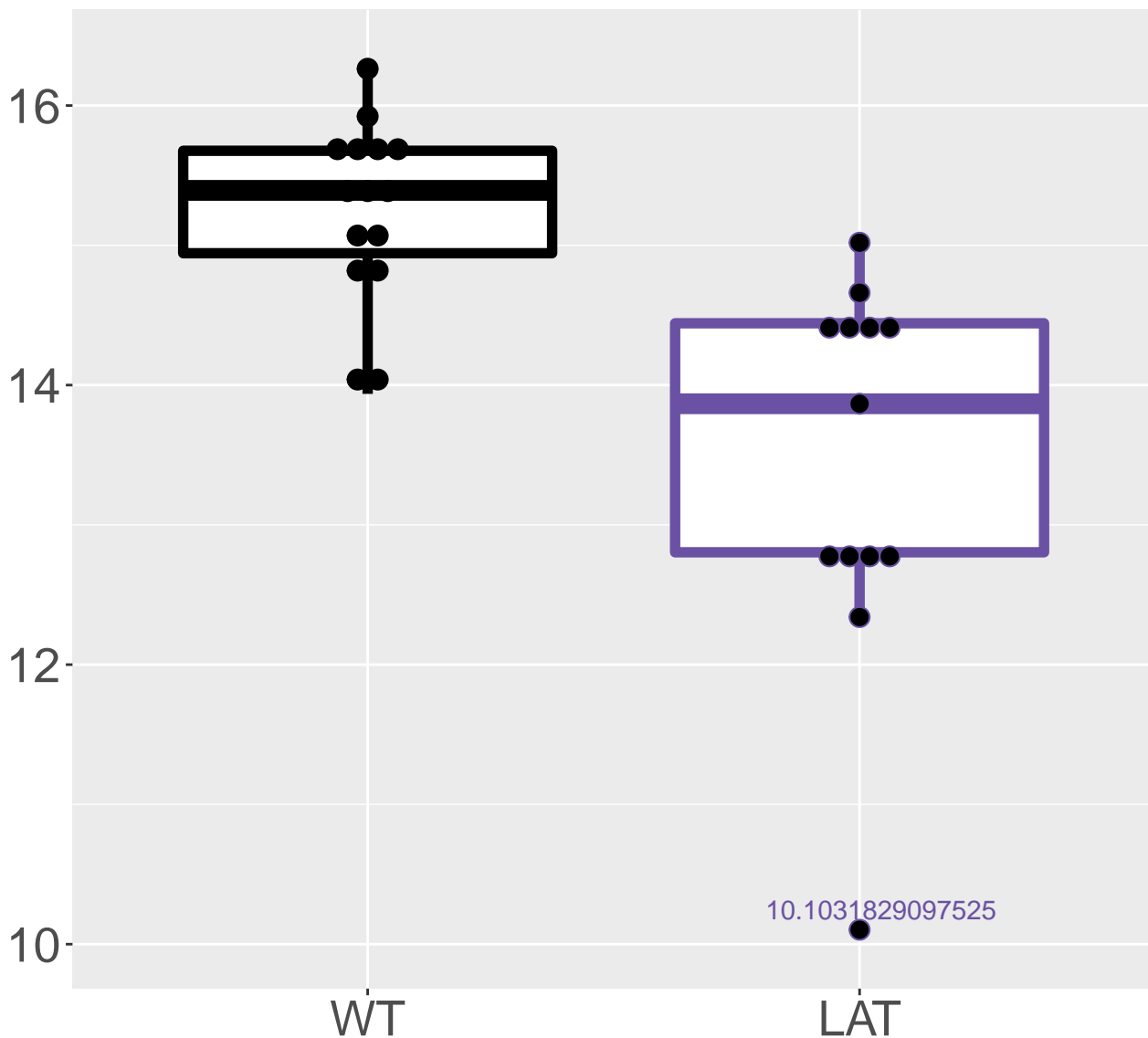
**M565.1823T577.86**

**FDR = 0.00036, FC = -0.97**



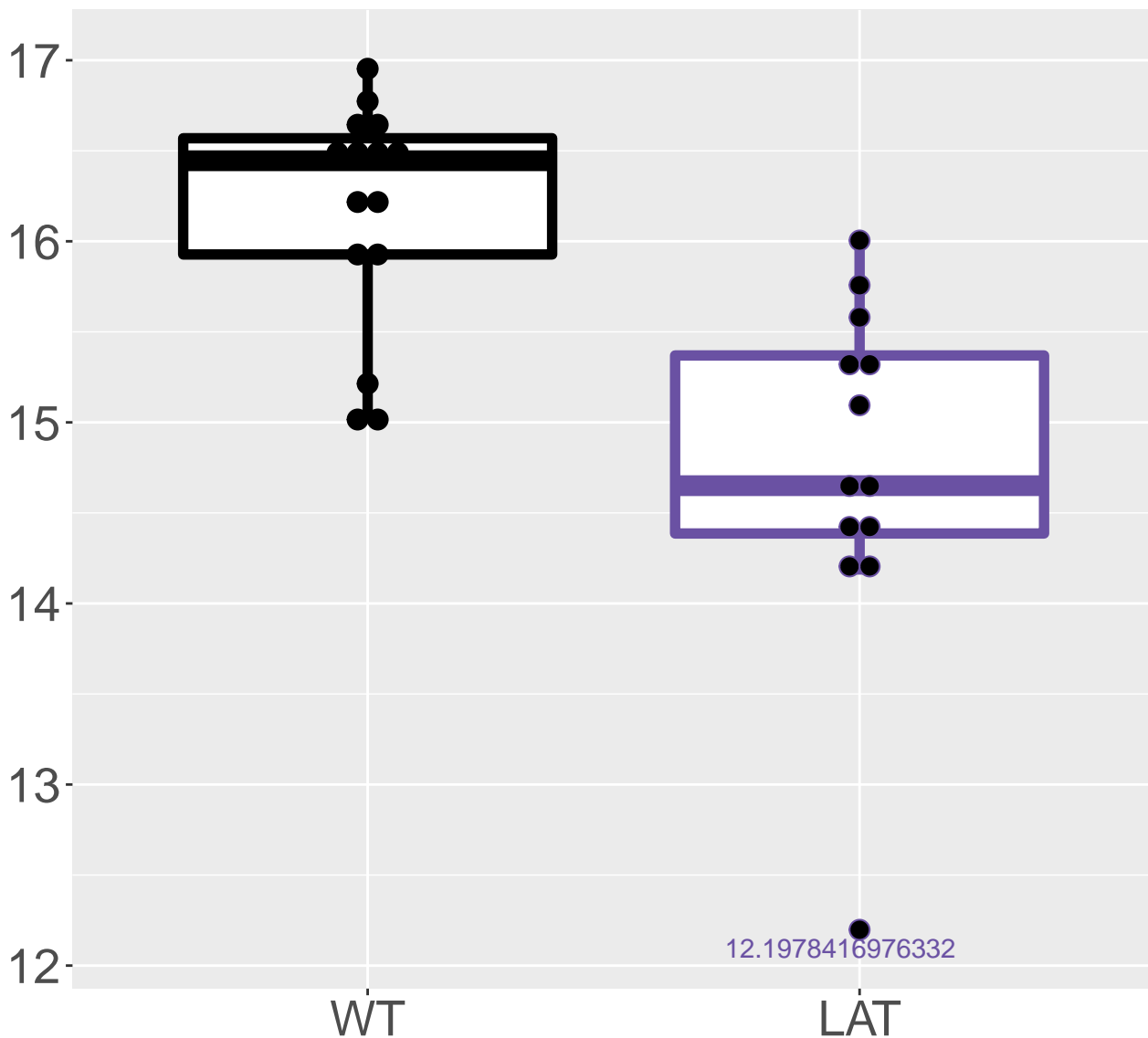
**M294.0831T294.54**

**FDR = 0.00037, FC = -1.8**



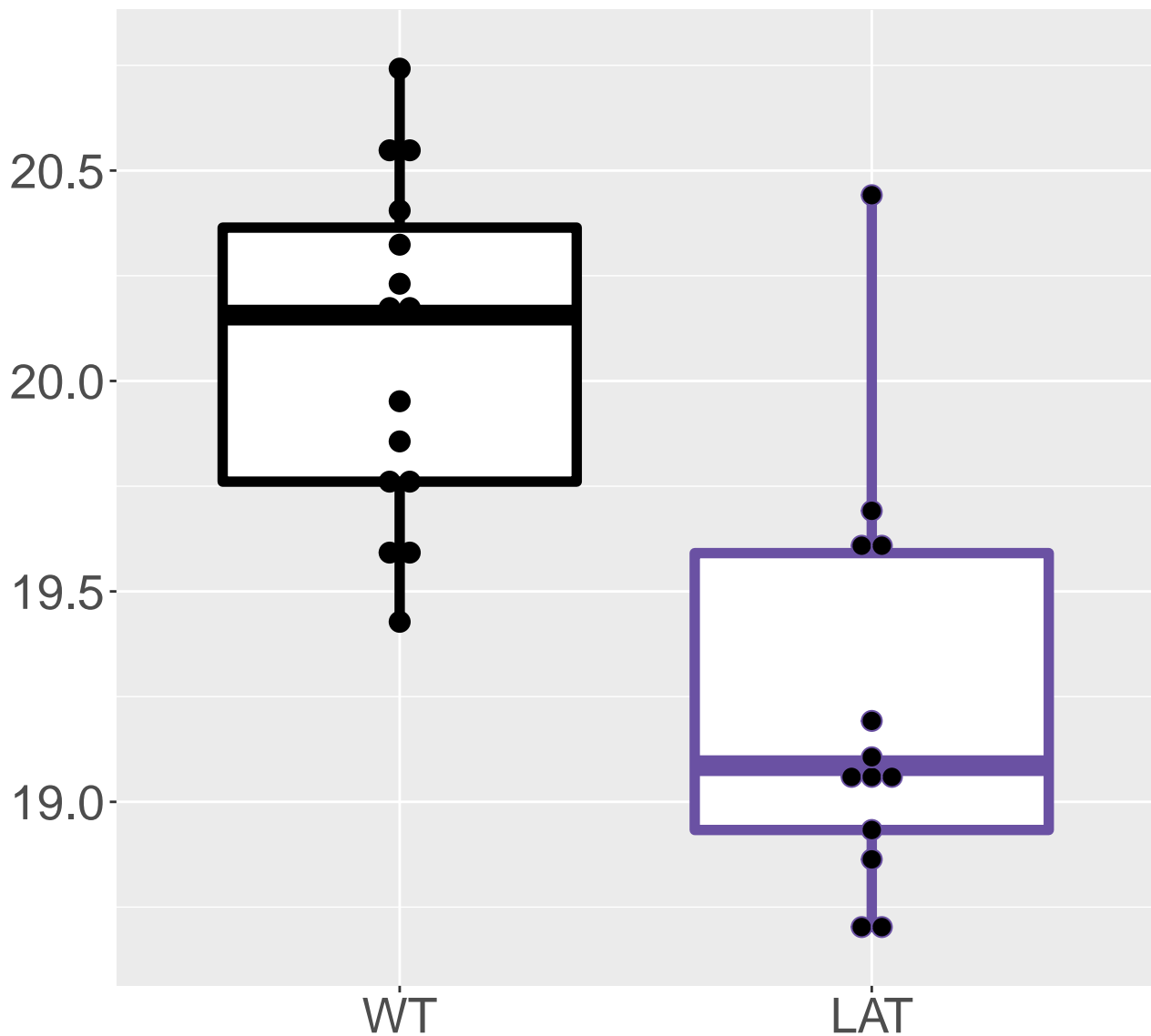
**M349.1256T323.12**

**FDR = 0.00037, FC = -1.4**



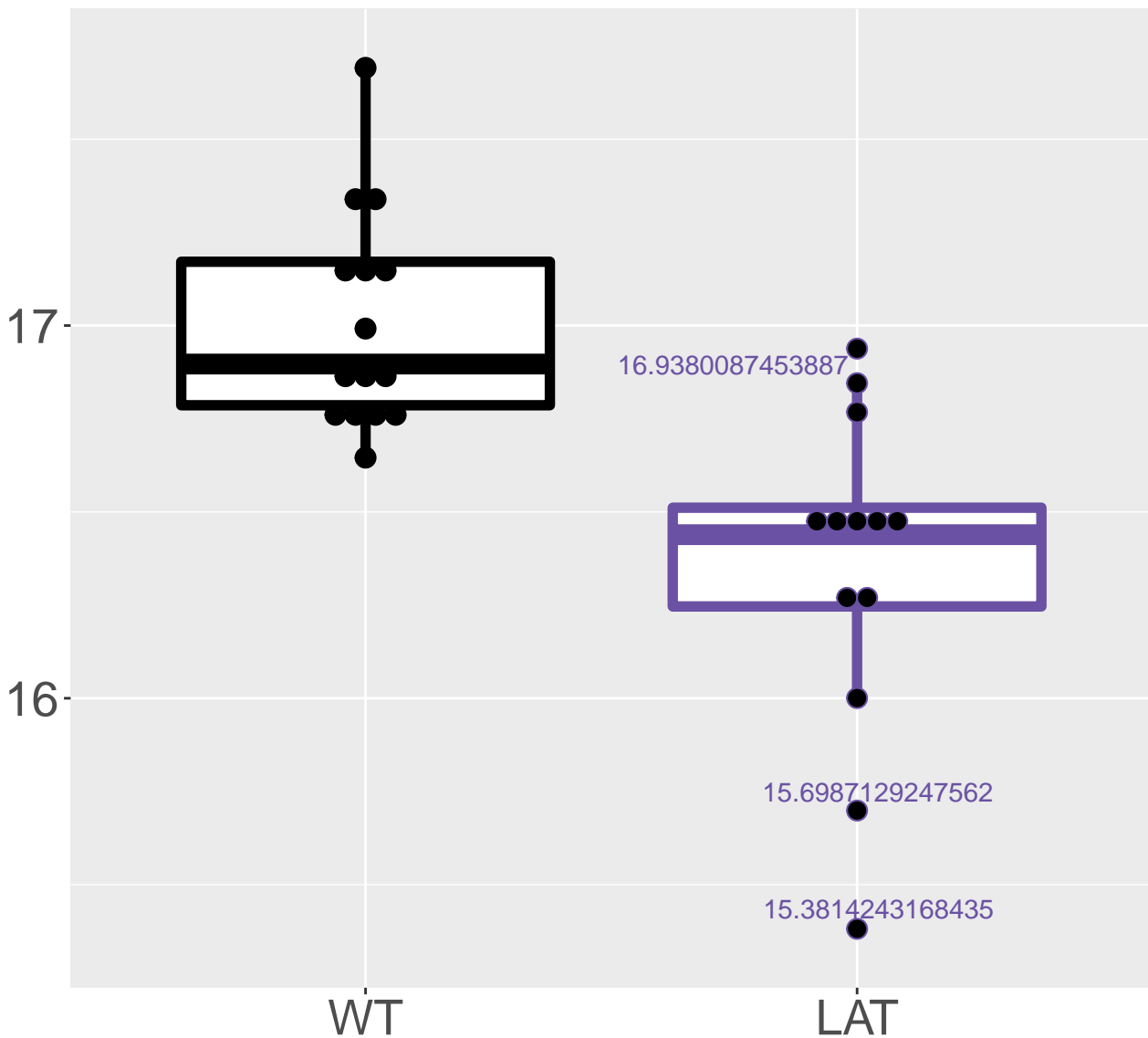
**M575.1836T649.76**

**FDR = 0.00038, FC = -0.84**



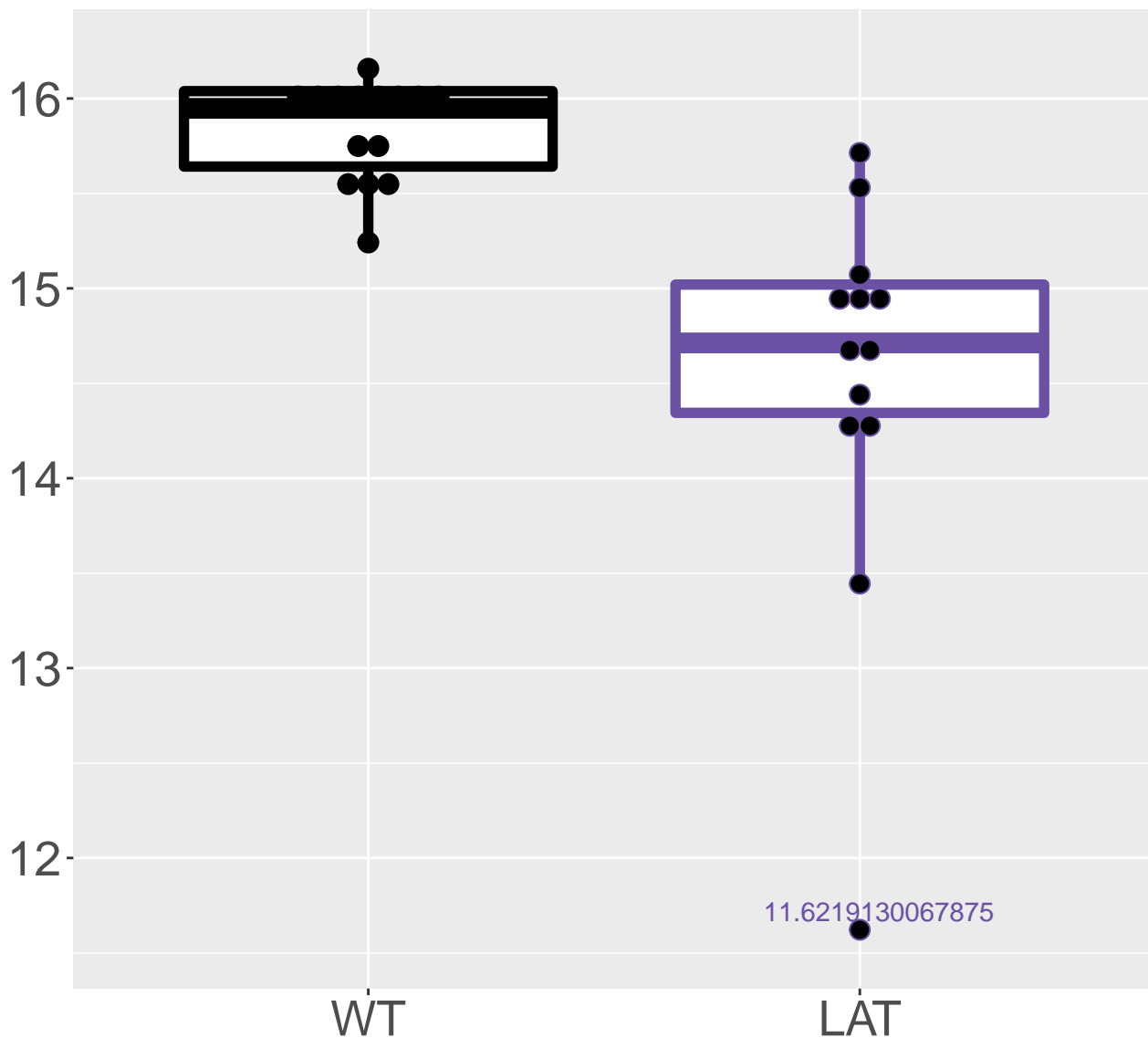
**M260.0599T173.79**

**FDR = 0.00038, FC = -0.66**



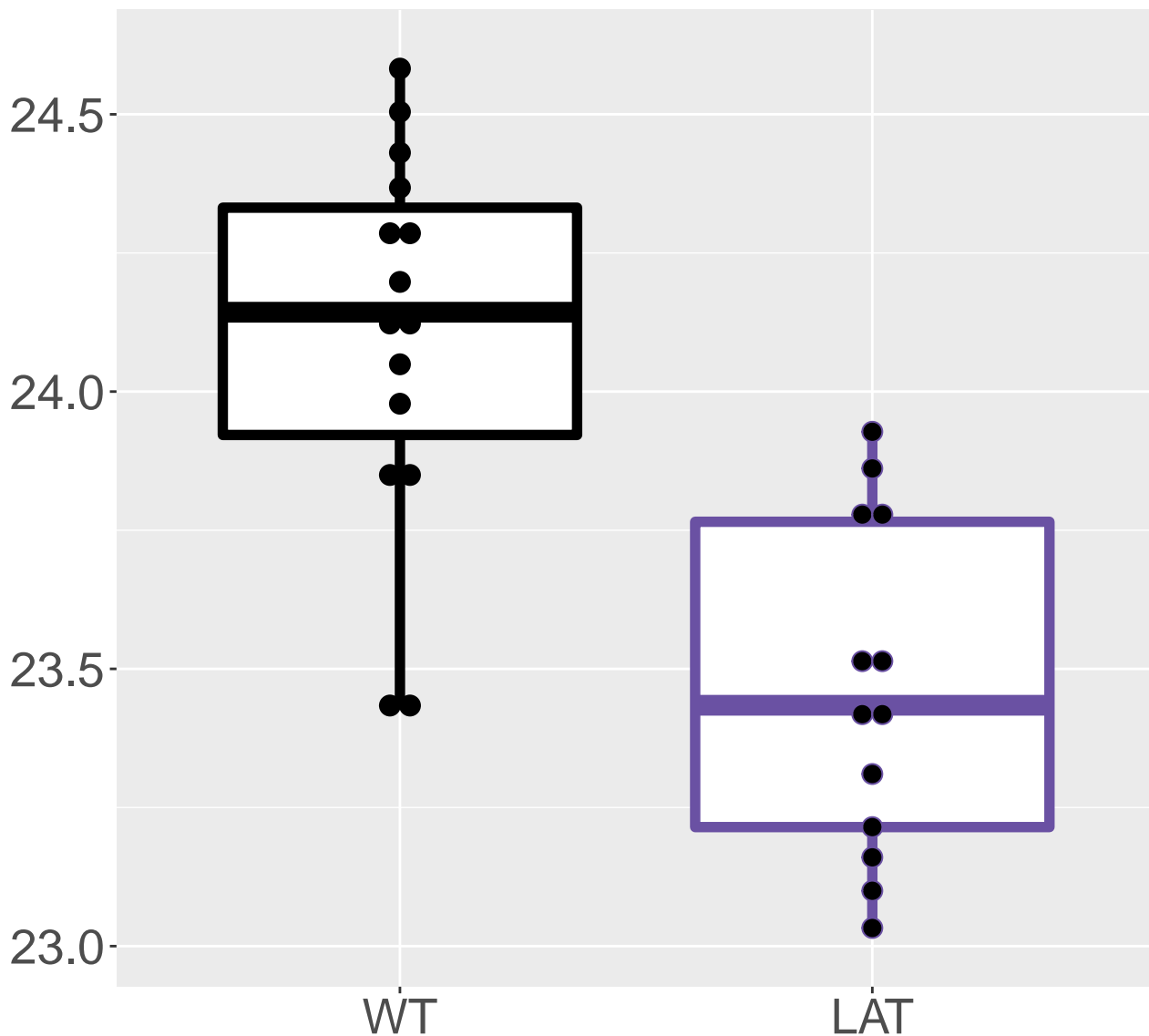
**M557.6557T592.8**

**FDR = 0.00038, FC = -1.3**



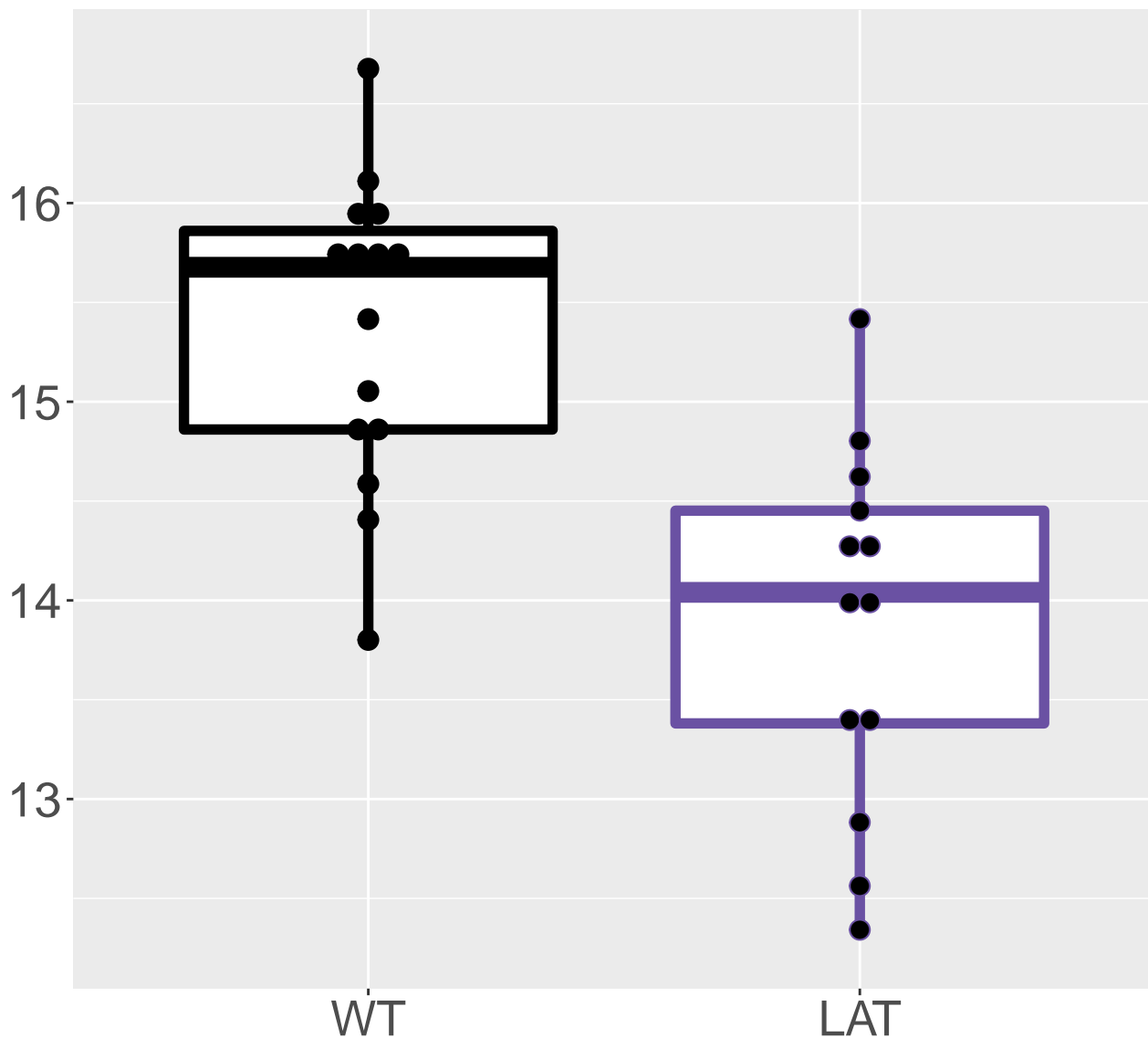


**L-Asparagine; Asparagine**  
**FDR = 0.00038, FC = -0.64**



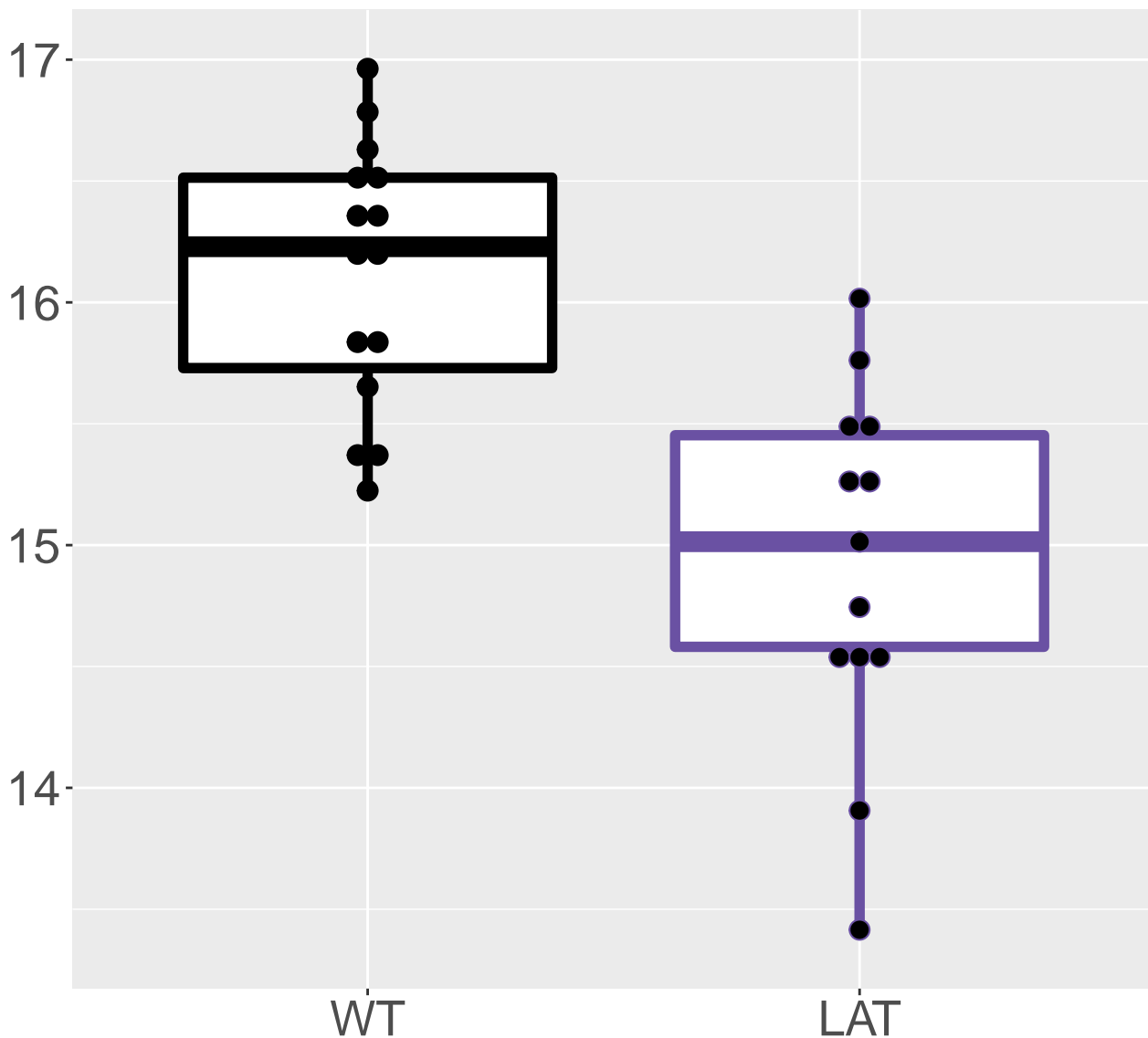
**M575.2036T542.19**

**FDR = 0.00038, FC = -1.5**

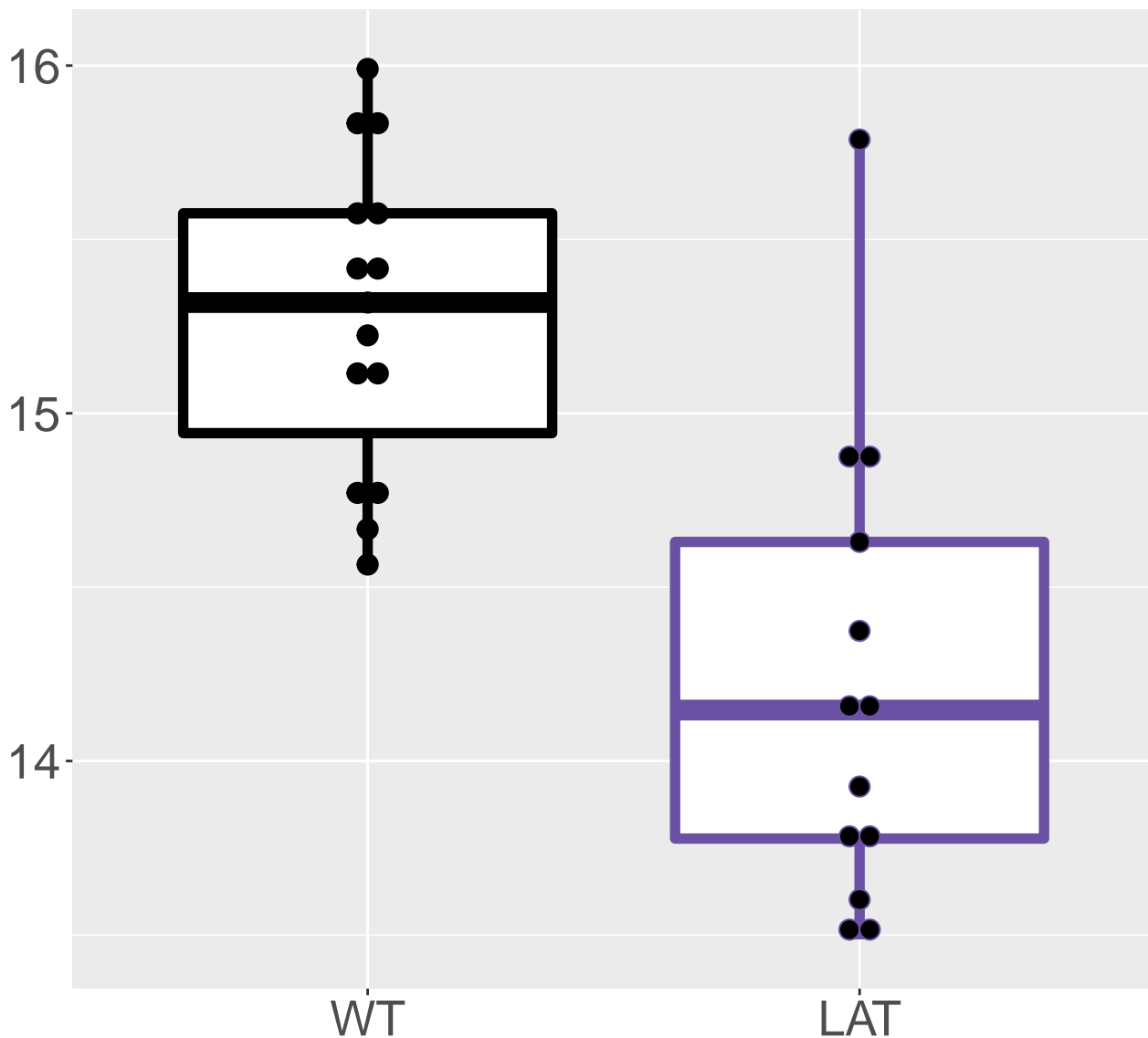


**M383.183T176.11**

**FDR = 0.00038, FC = -1.2**

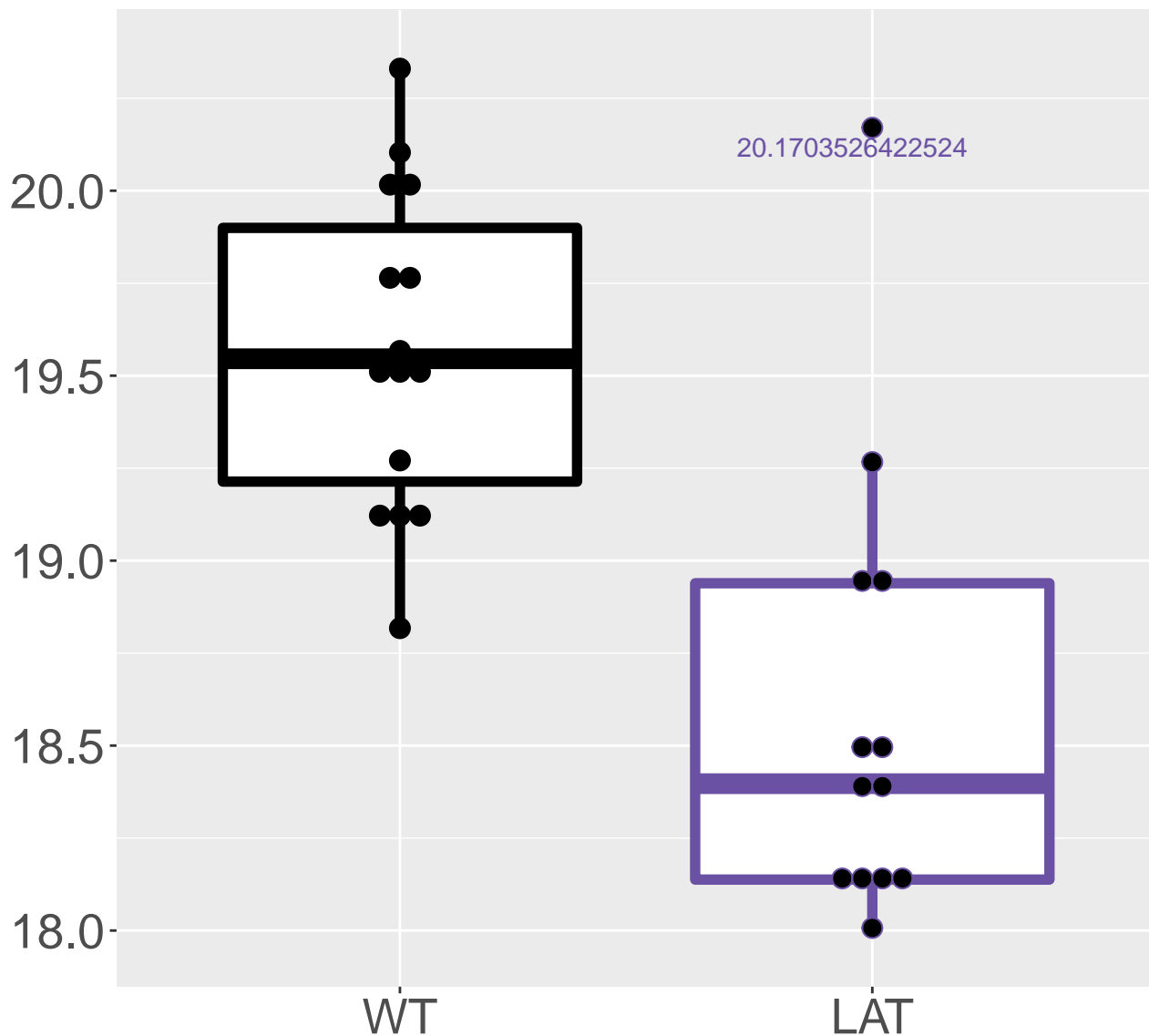


**M657.7141T660.39**  
**FDR = 0.00038, FC = -1**



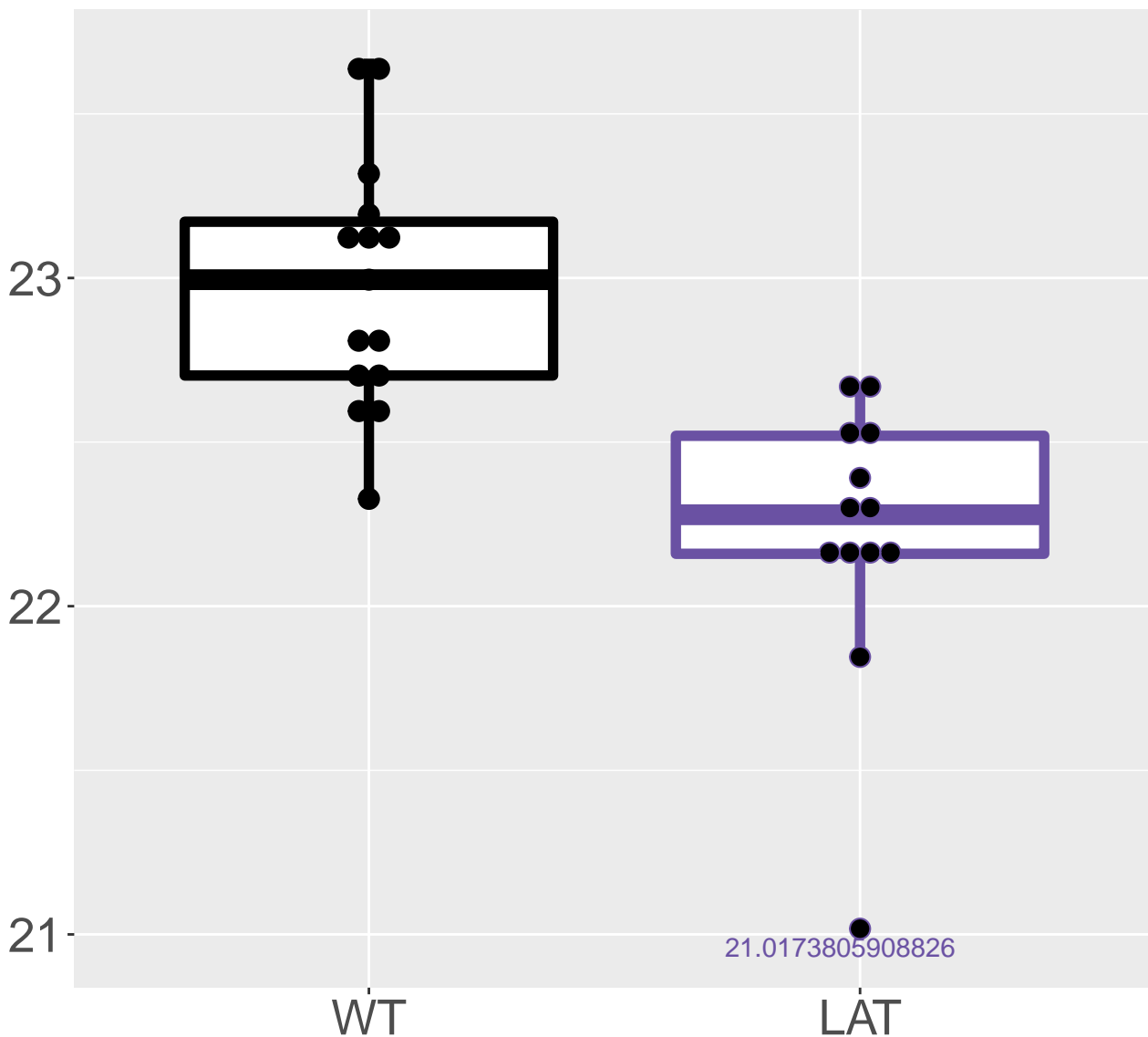
**M818.2626T675.59**

**FDR = 0.00038, FC = -0.98**



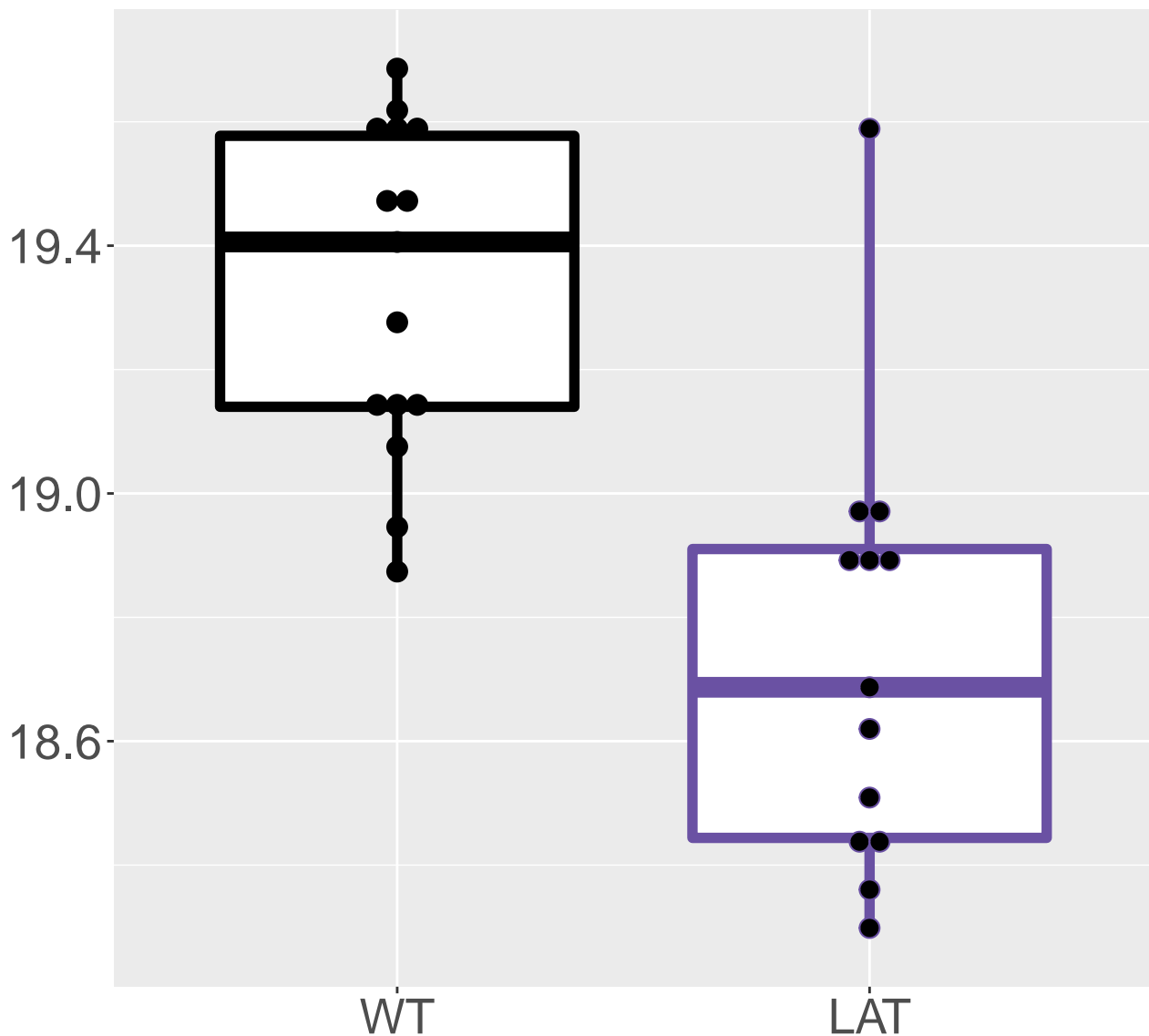
**M256.0597T397.42**

**FDR = 0.00039, FC = -0.76**



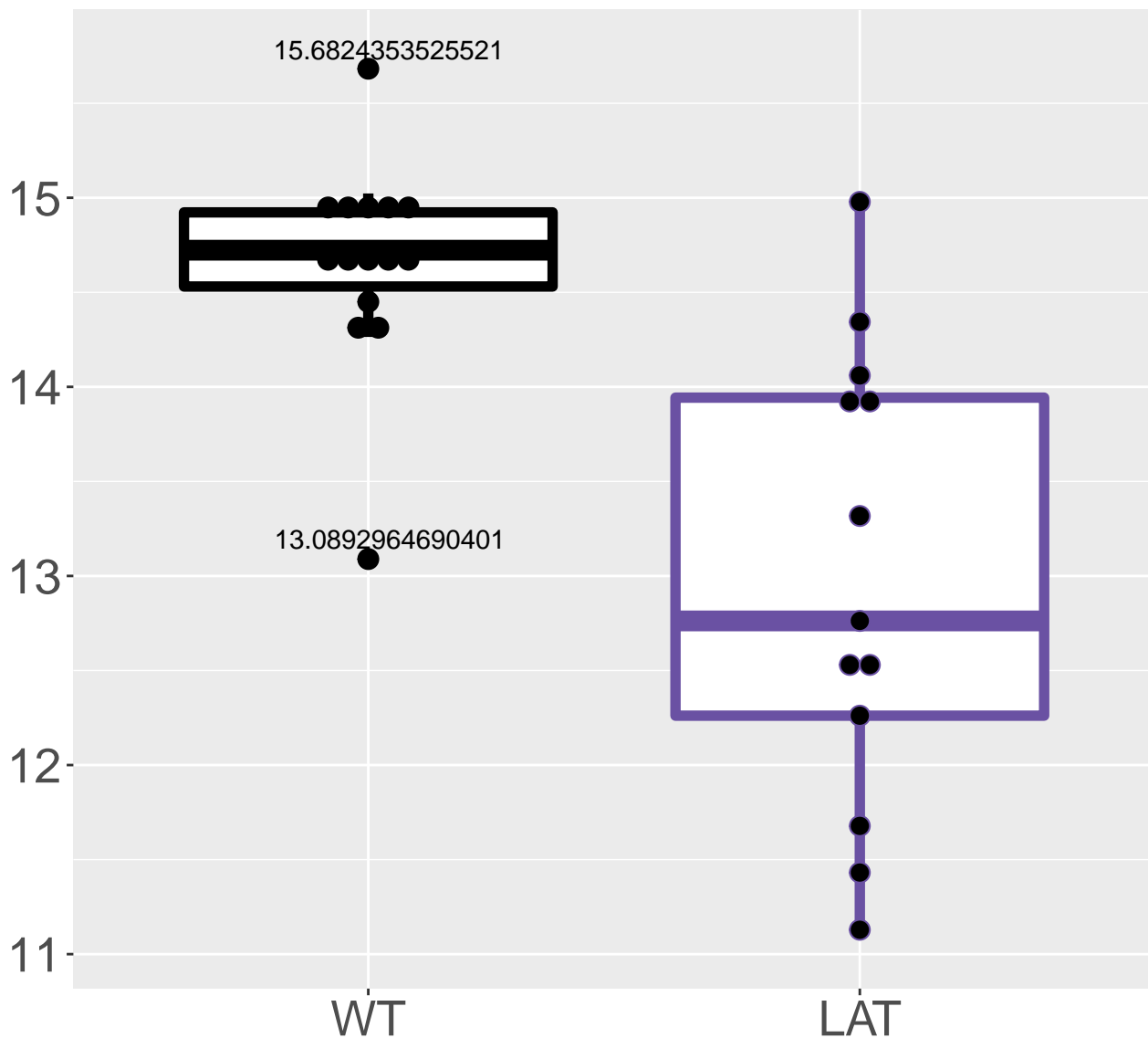
**M426.1344T578.03**

**FDR = 0.00041, FC = -0.6**



**M666.2095T513.09**

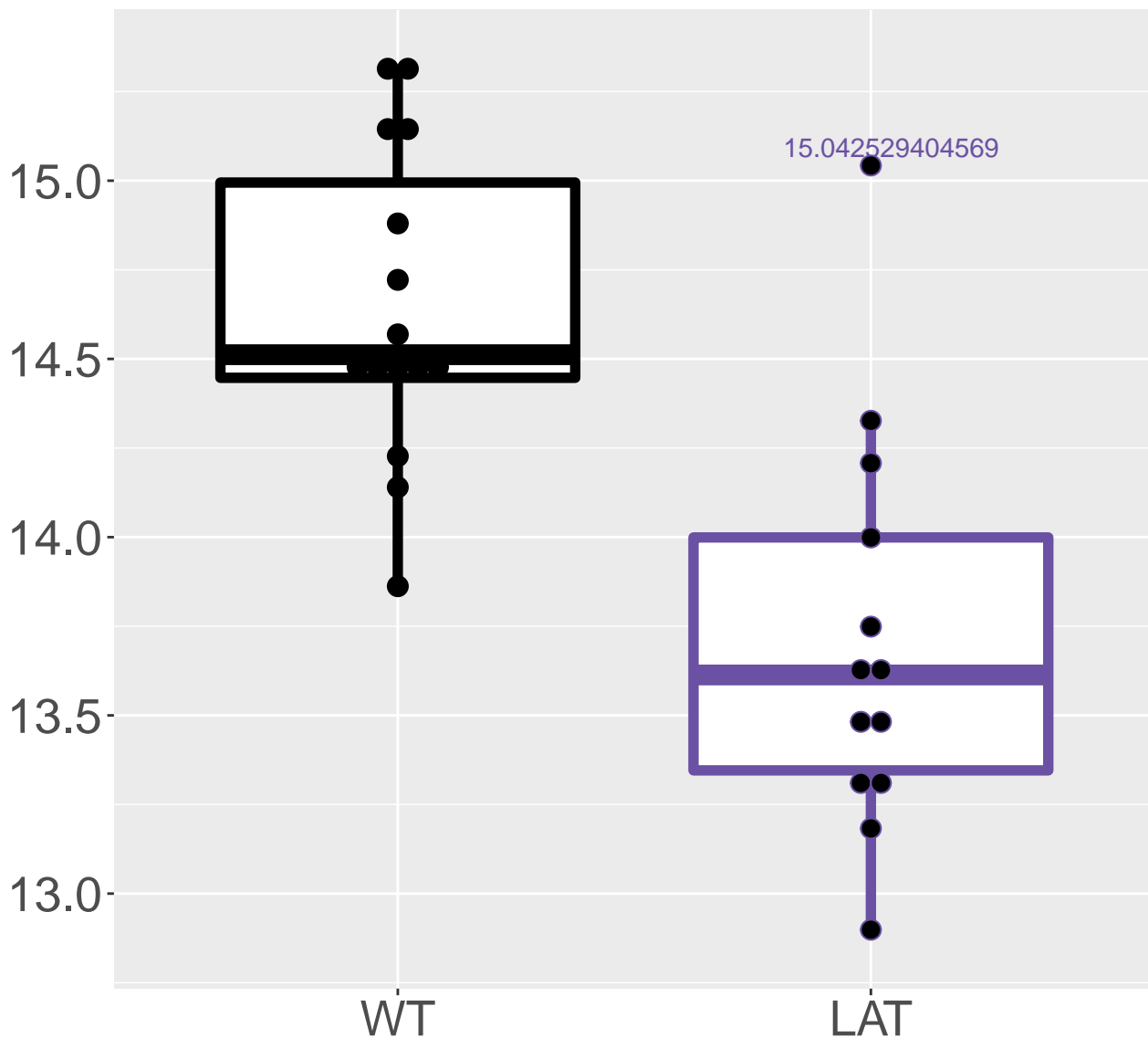
**FDR = 0.00041, FC = -1.7**





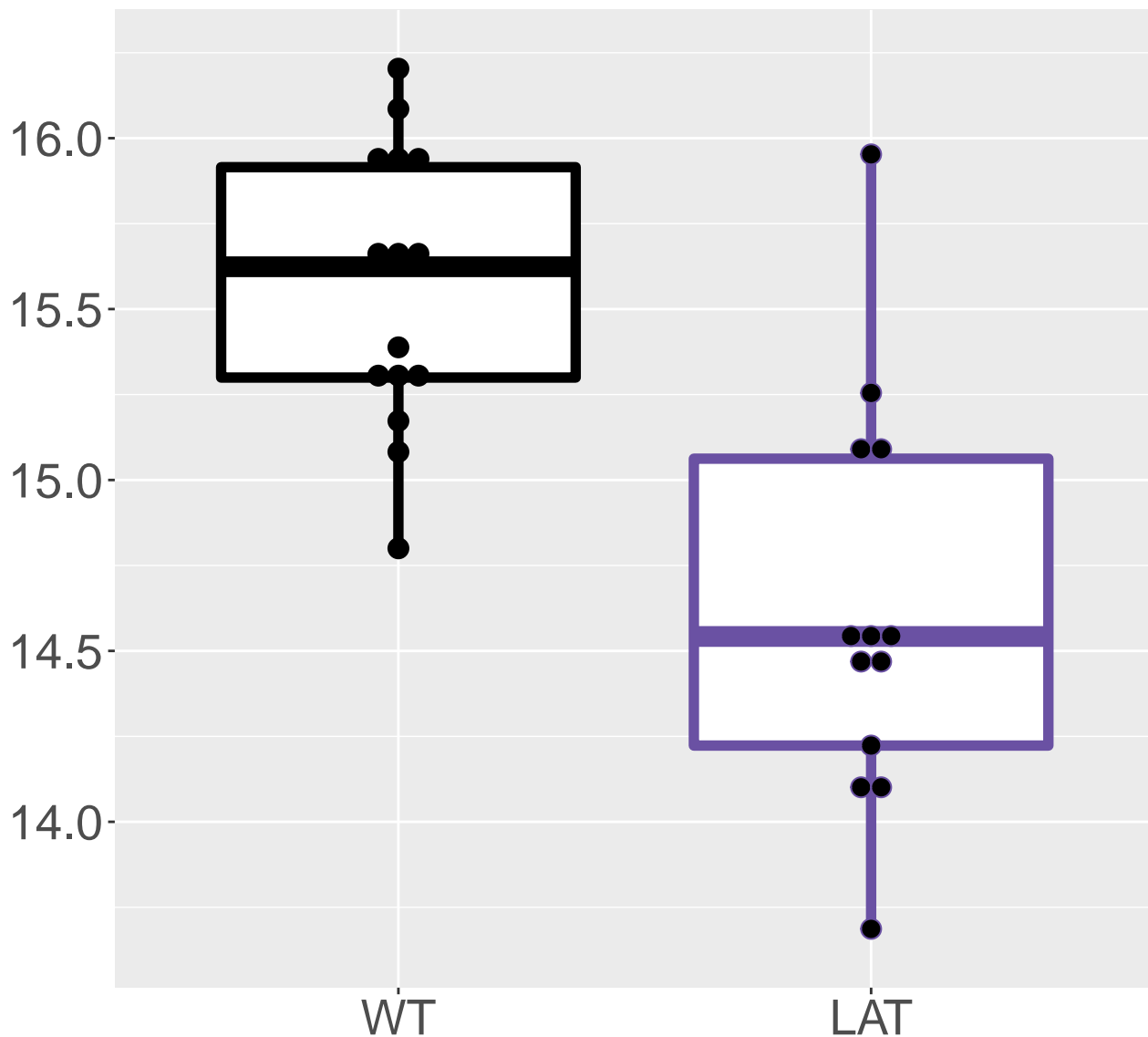
**M455.1417T640.08**

**FDR = 0.00042, FC = -0.93**



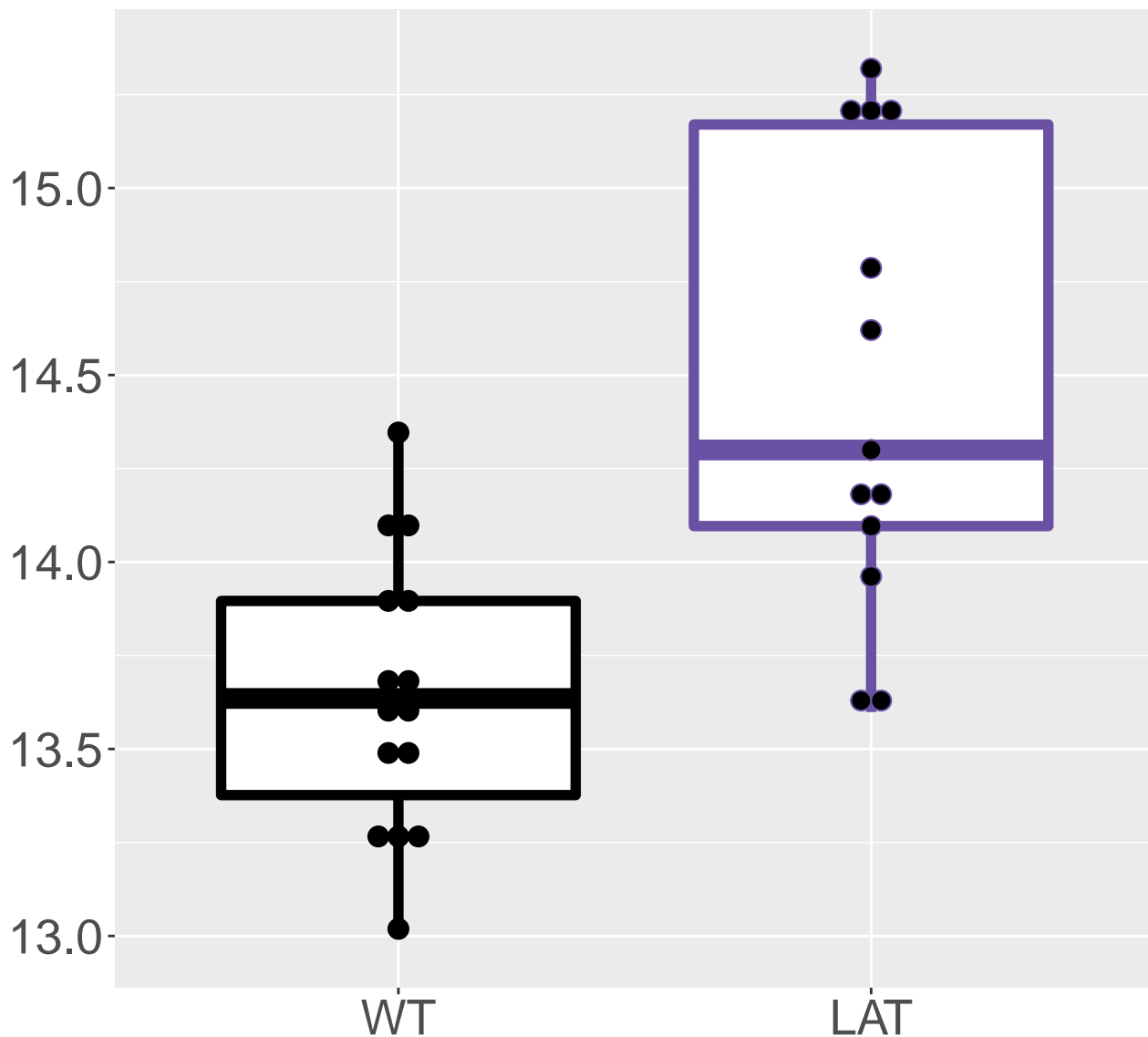
**M576.6878T649.91**

**FDR = 0.00042, FC = -0.94**



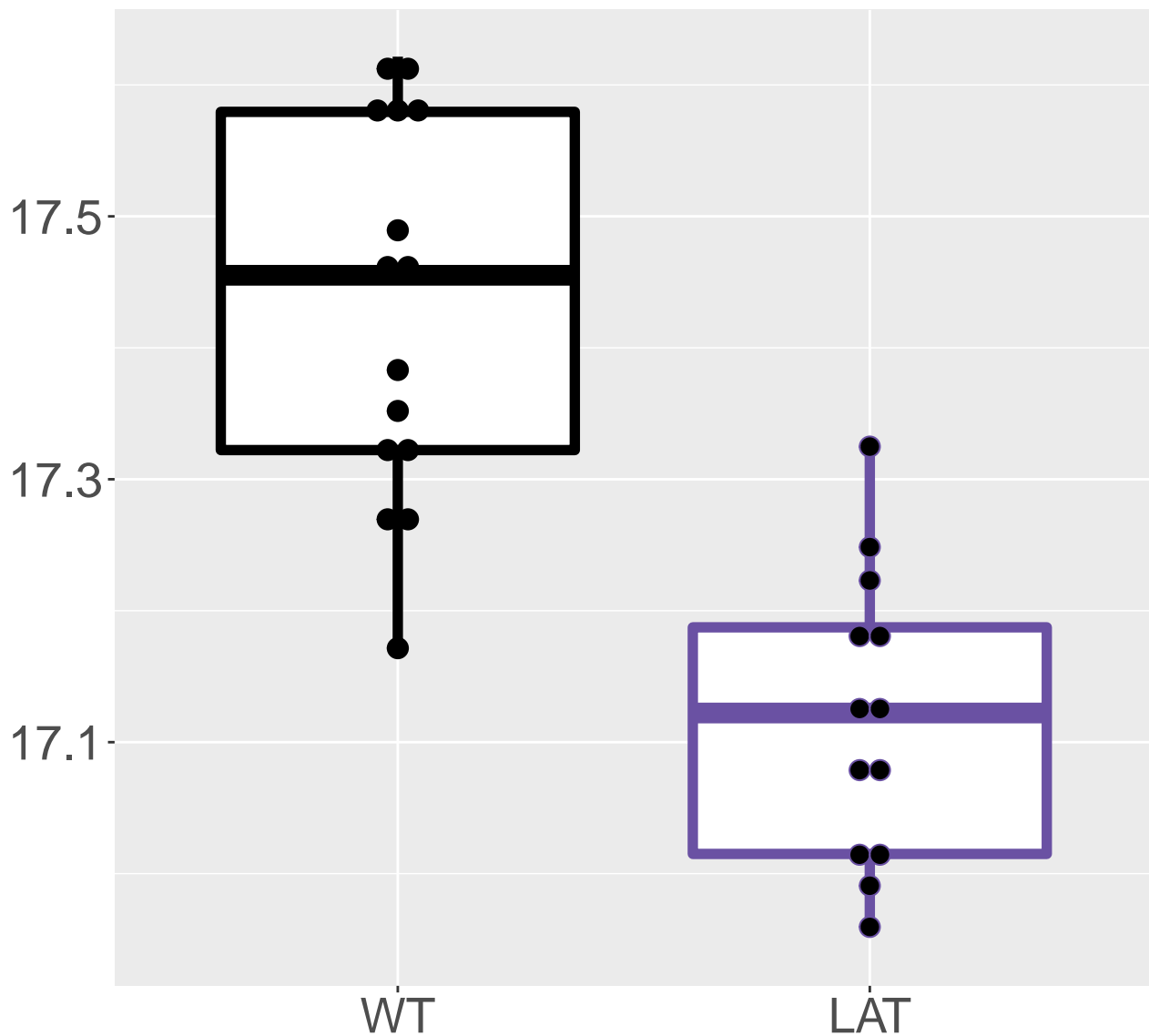
**M592.1032T661.47**

**FDR = 0.00042, FC = 0.84**

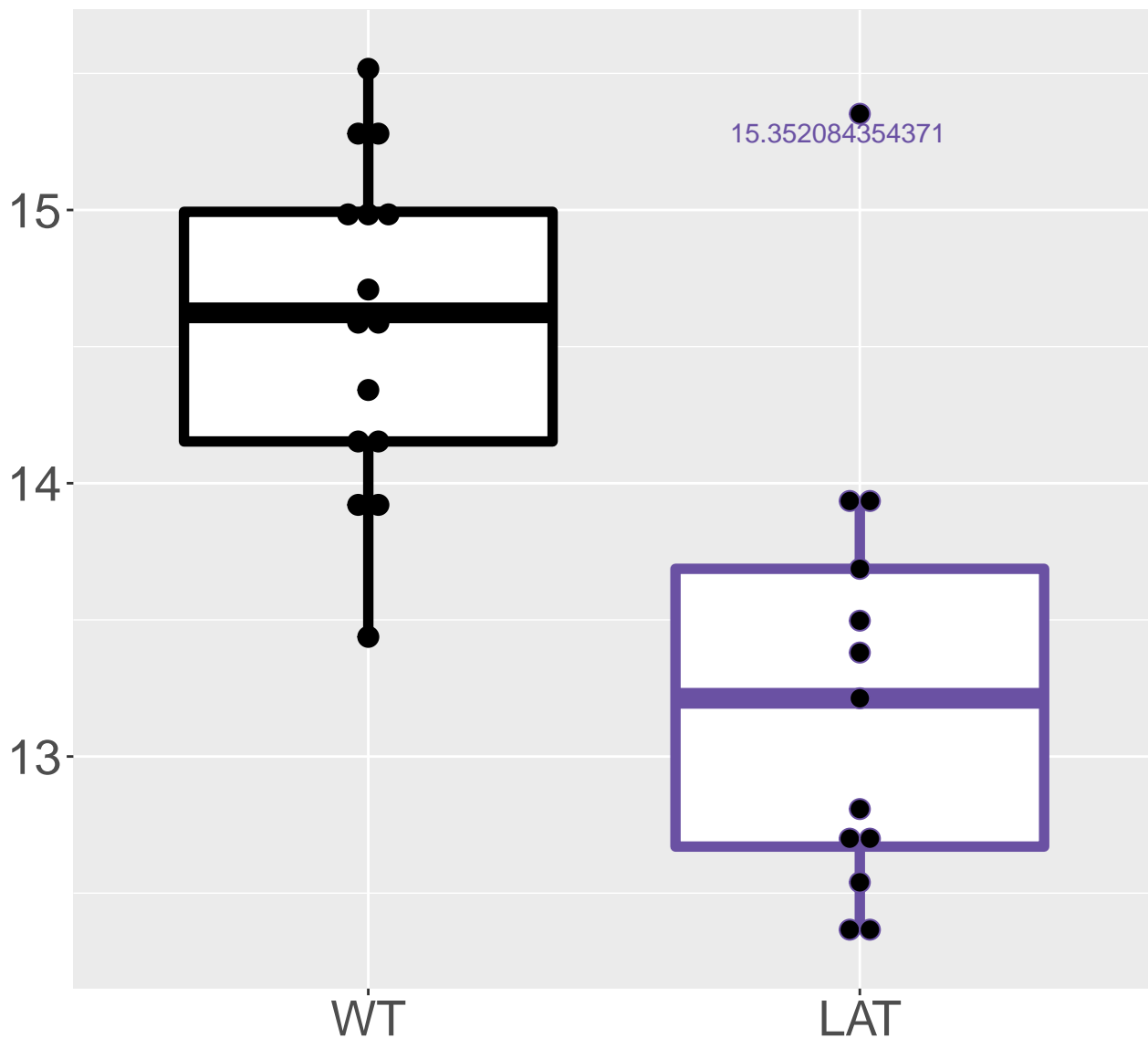


**M925.2443T626.31**

**FDR = 0.00043, FC = -0.31**

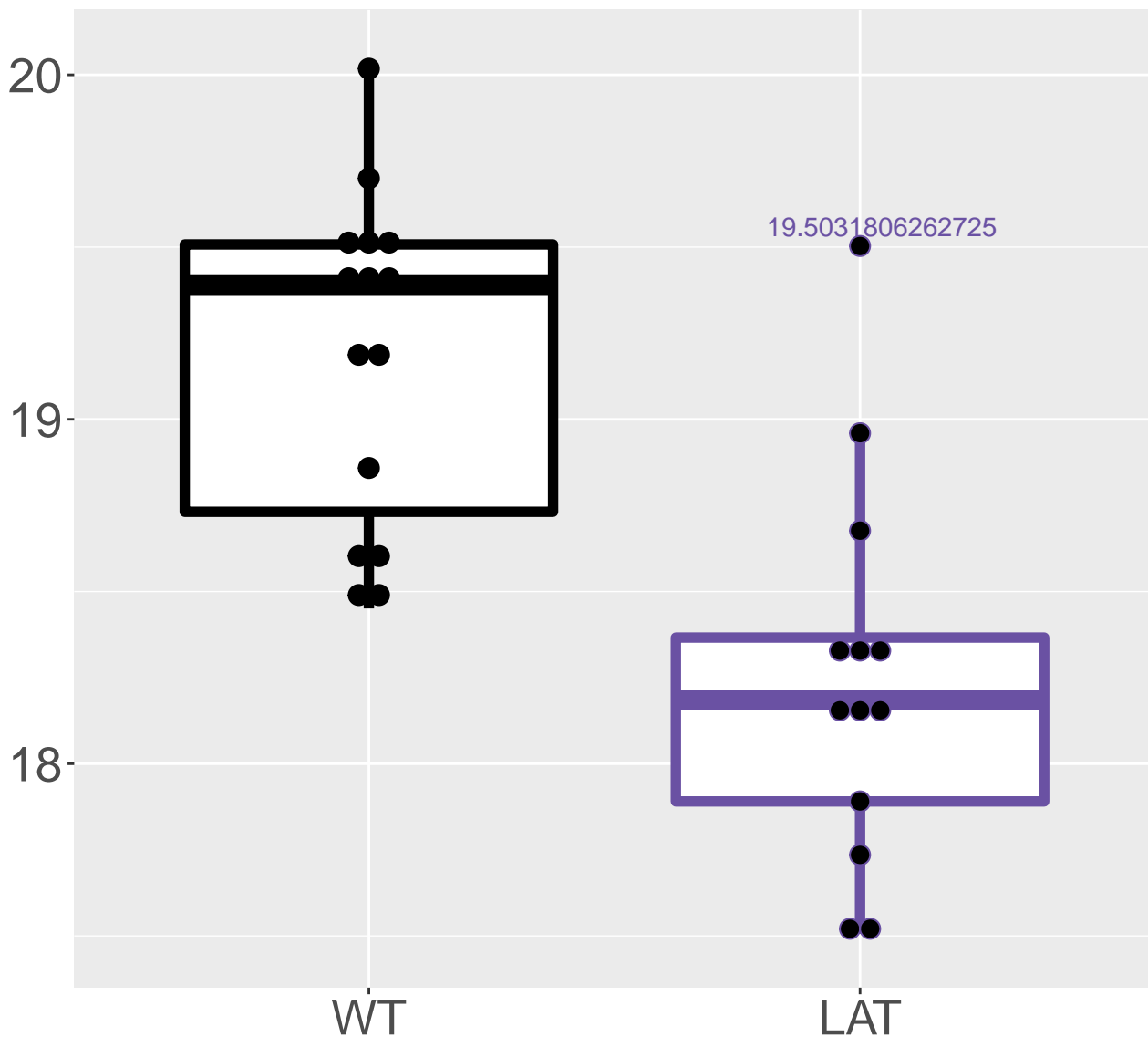


**M767.7442T668.42\_1**  
**FDR = 0.00043, FC = -1.3**



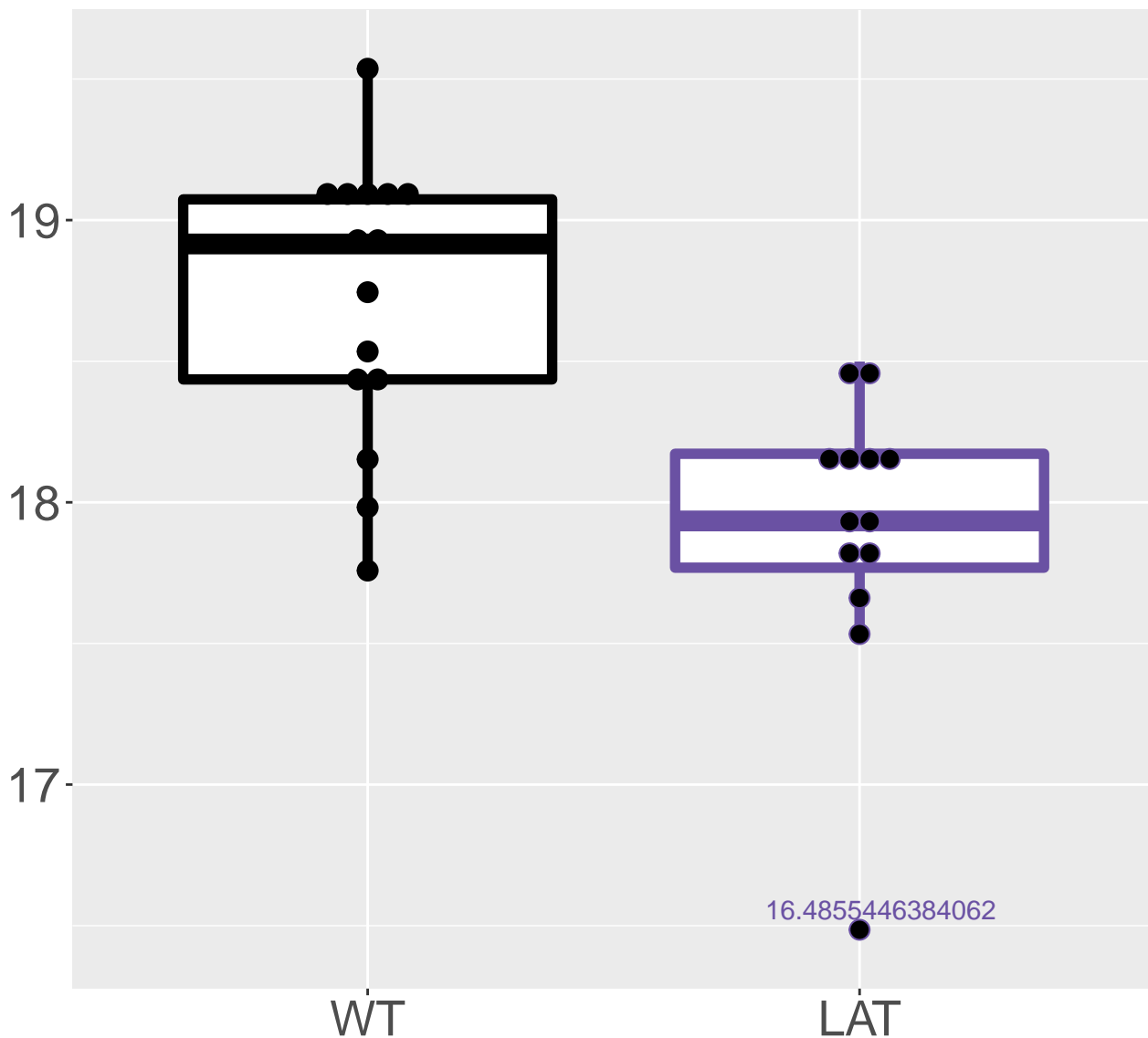
**M664.2315T588**

**FDR = 0.00043, FC = -0.95**

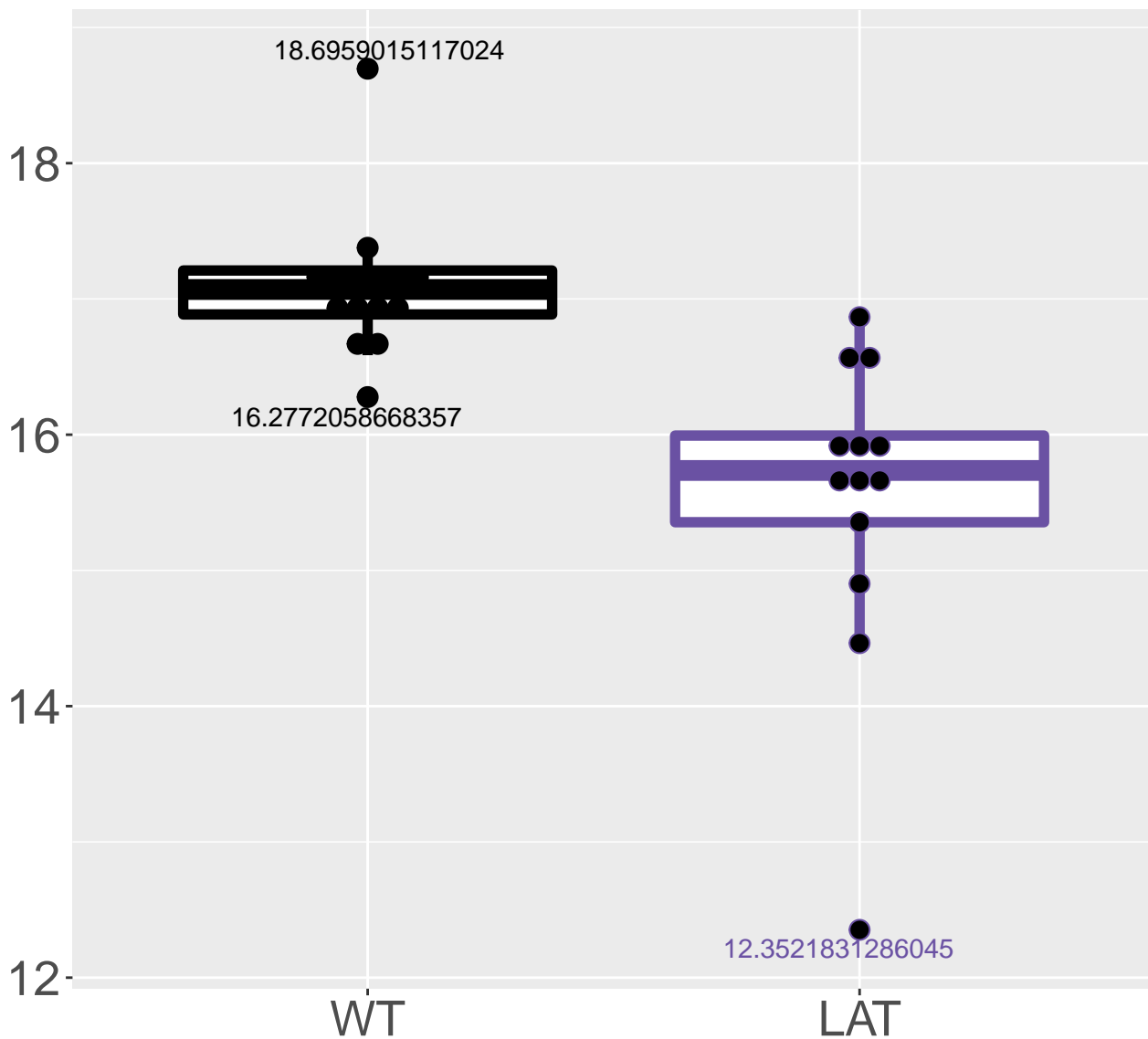


**M557.4578T78.2**

**FDR = 0.00043, FC = -0.82**



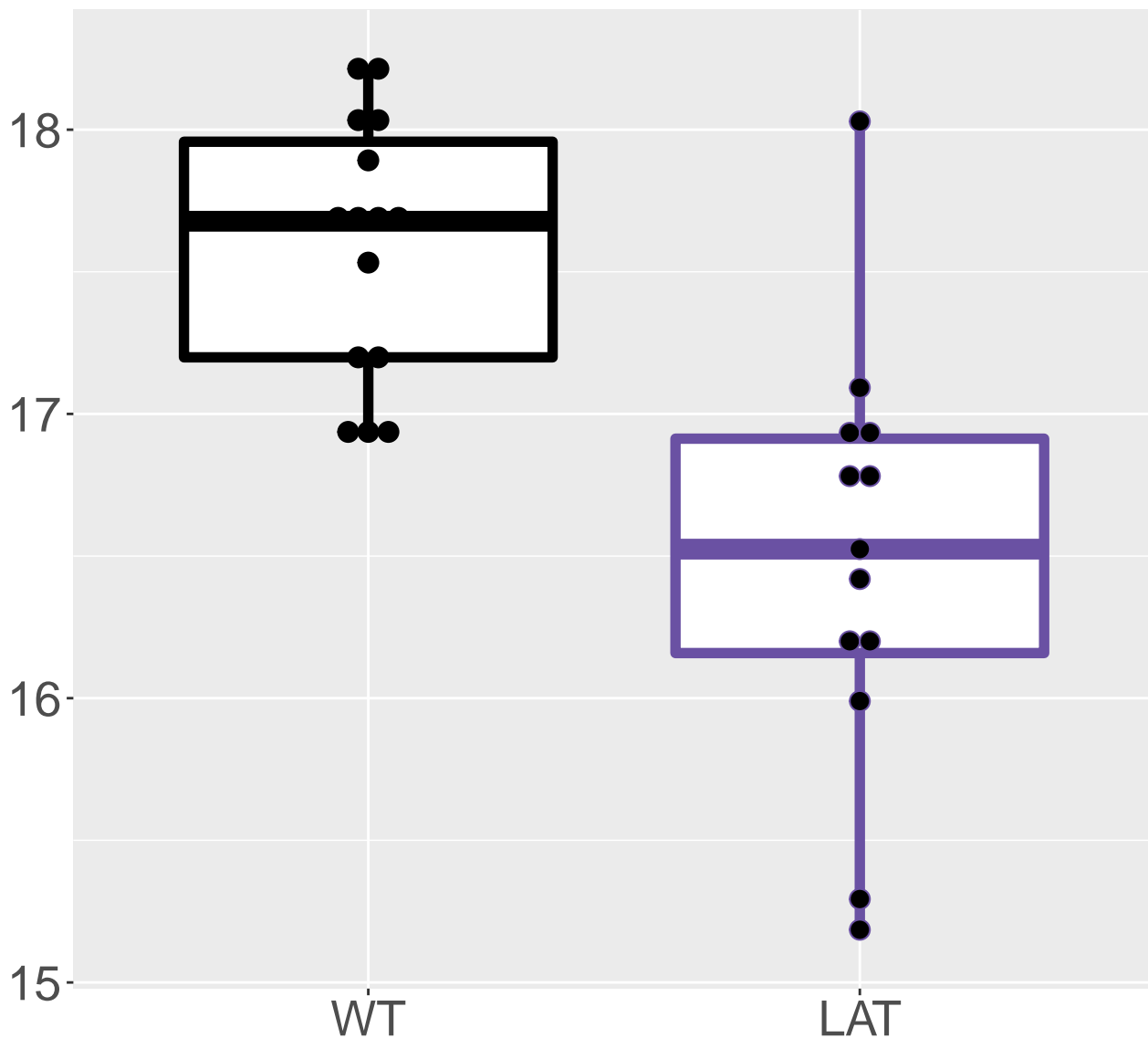
**FDR = 0.00044, FC = -1.6**



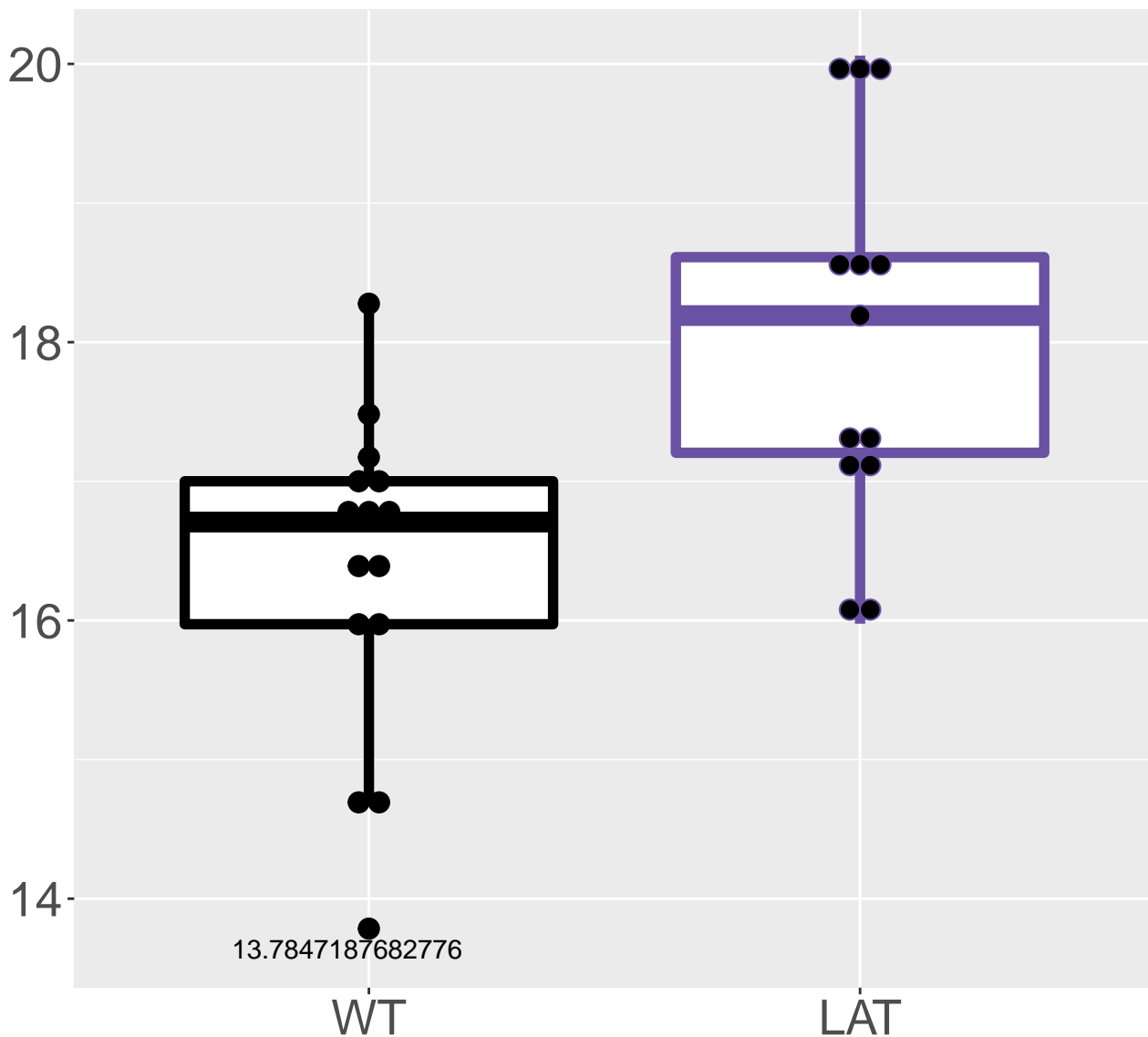


**M566.1833T577.74\_2**

**FDR = 0.00044, FC = -1.1**

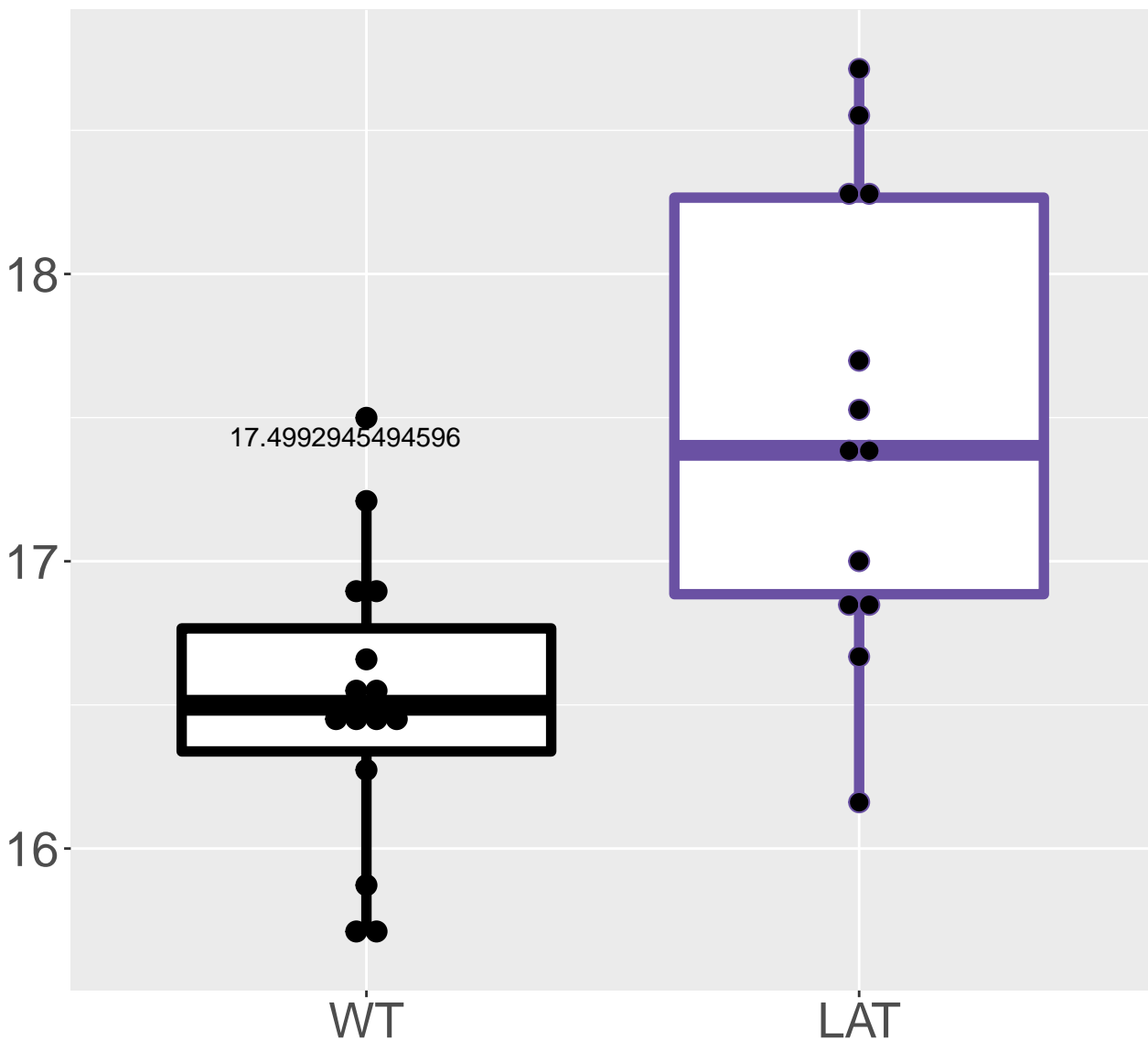


UMP;Uridine monophosphate;5'-Uridylic acid;U  
FDR = 0.00047, FC = 1.7, sex\*\*\*



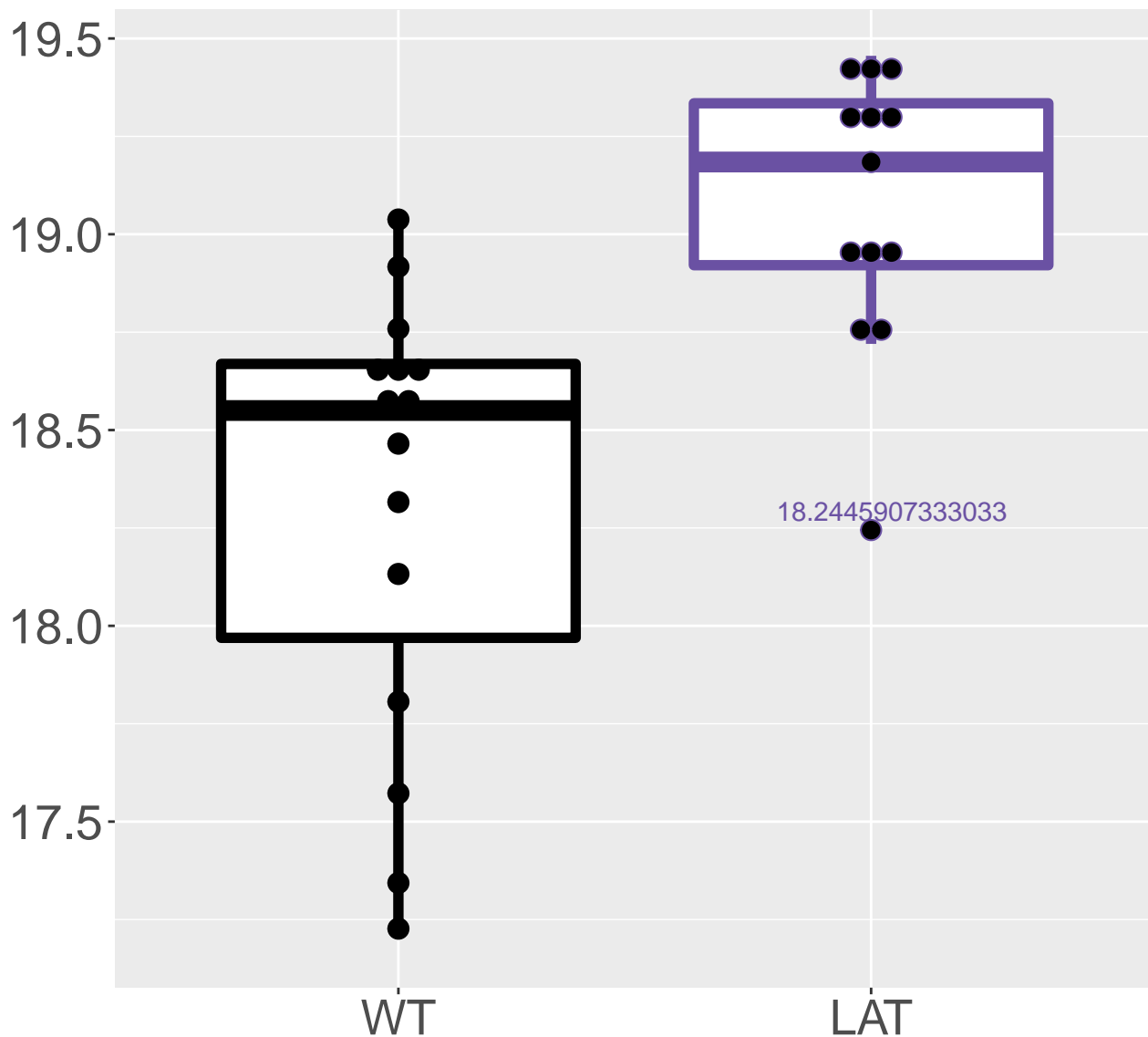
**M552.9537T555.58**

**FDR = 0.00047, FC = 0.98, sex\*\***



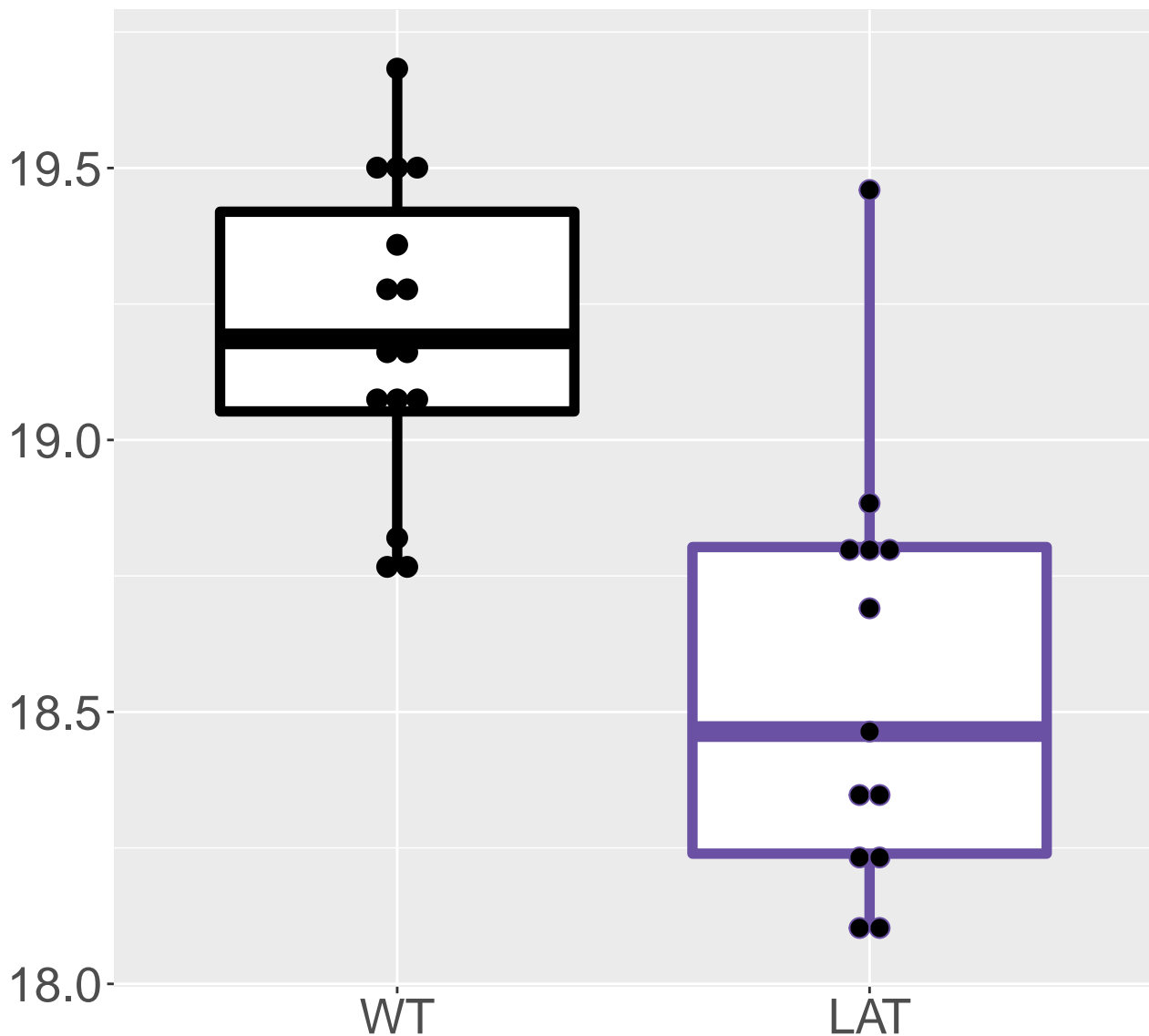
**M509.2887T77.56**

**FDR = 0.00048, FC = 0.76**



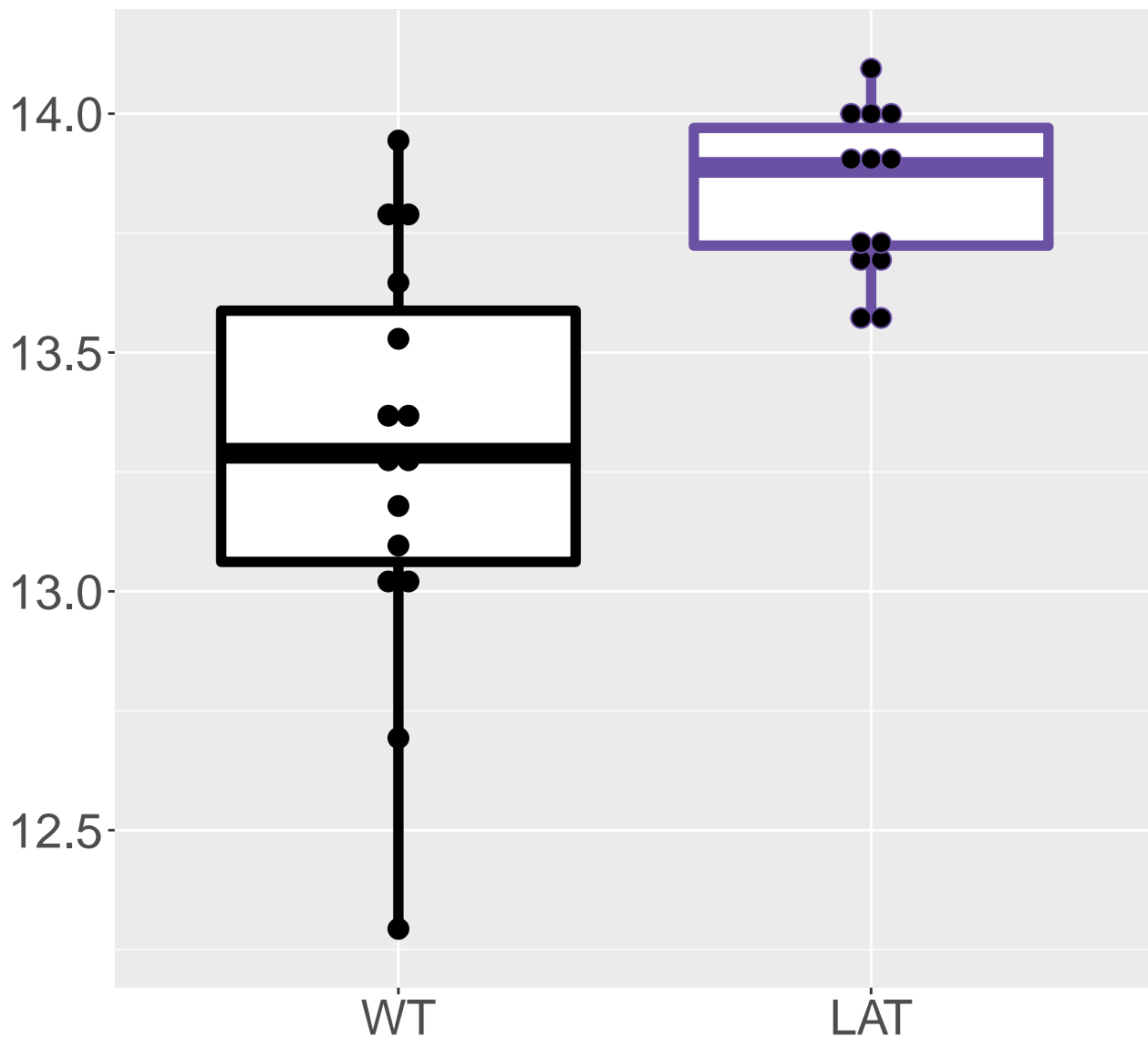
**M444.1449T577.99**

**FDR = 0.00048, FC = -0.64**



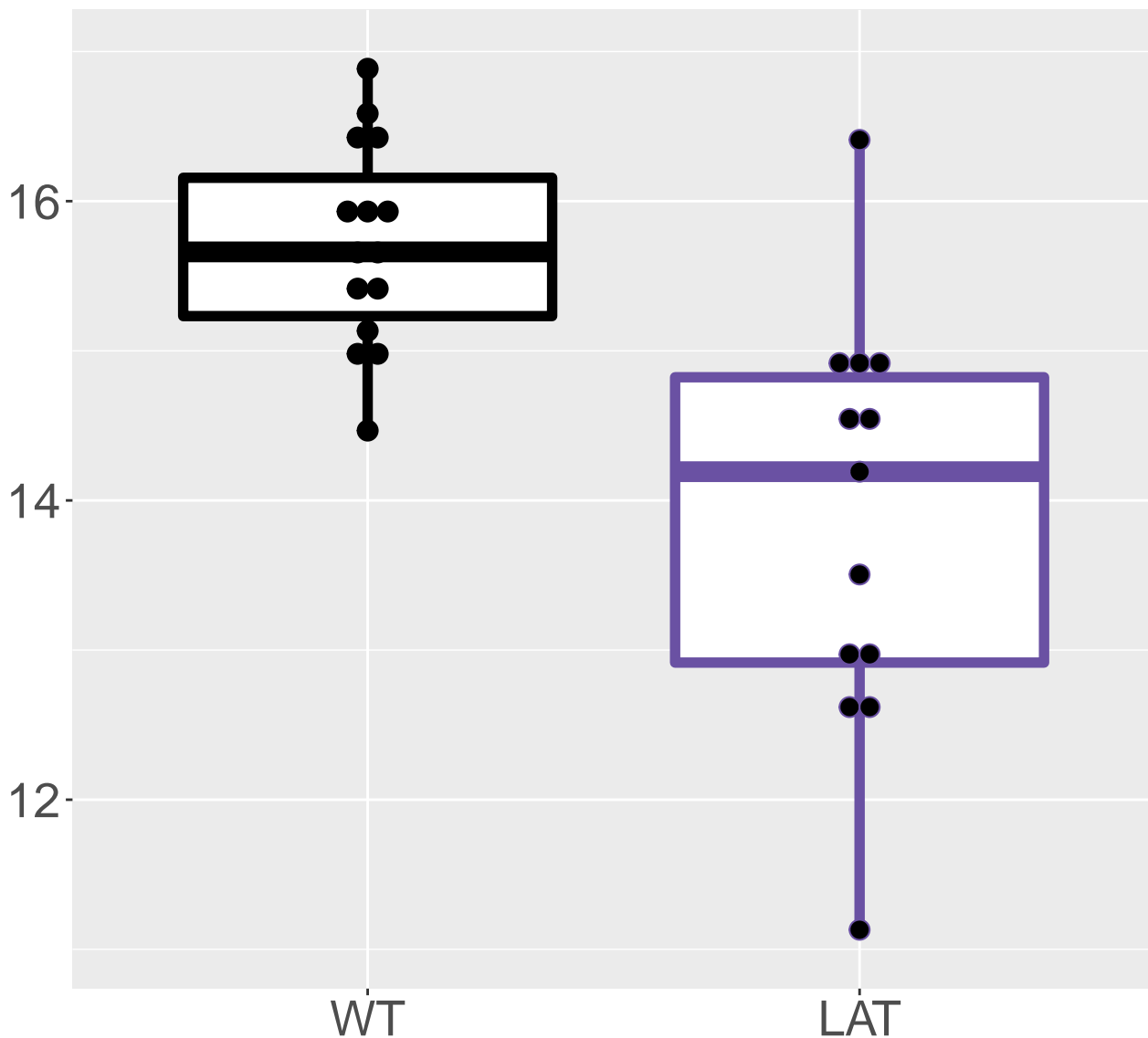
**M319.0786T651.7**

**FDR = 0.00049, FC = 0.55**



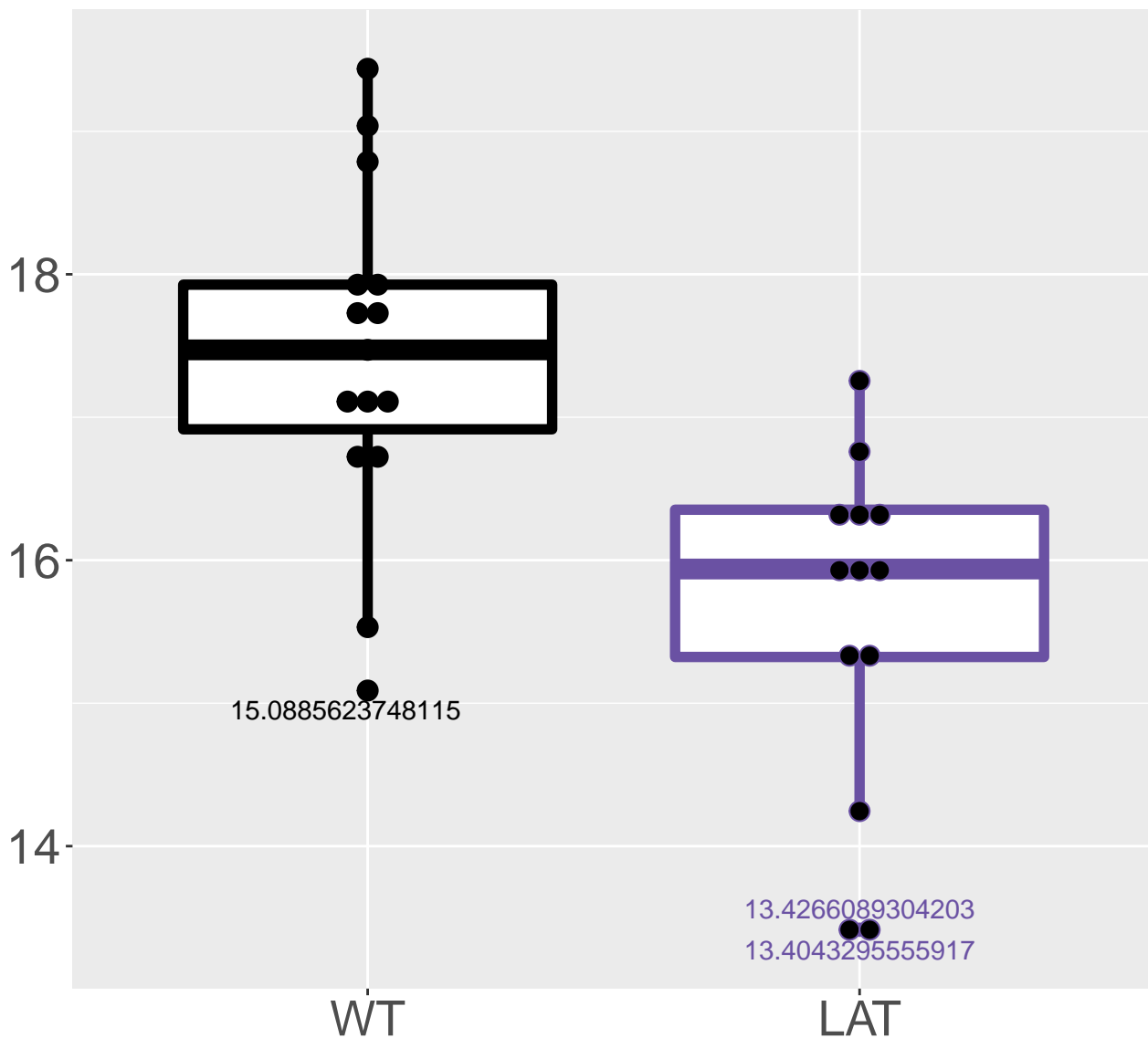
**M903.2712T541.41**

**FDR = 0.00049, FC = -1.9**



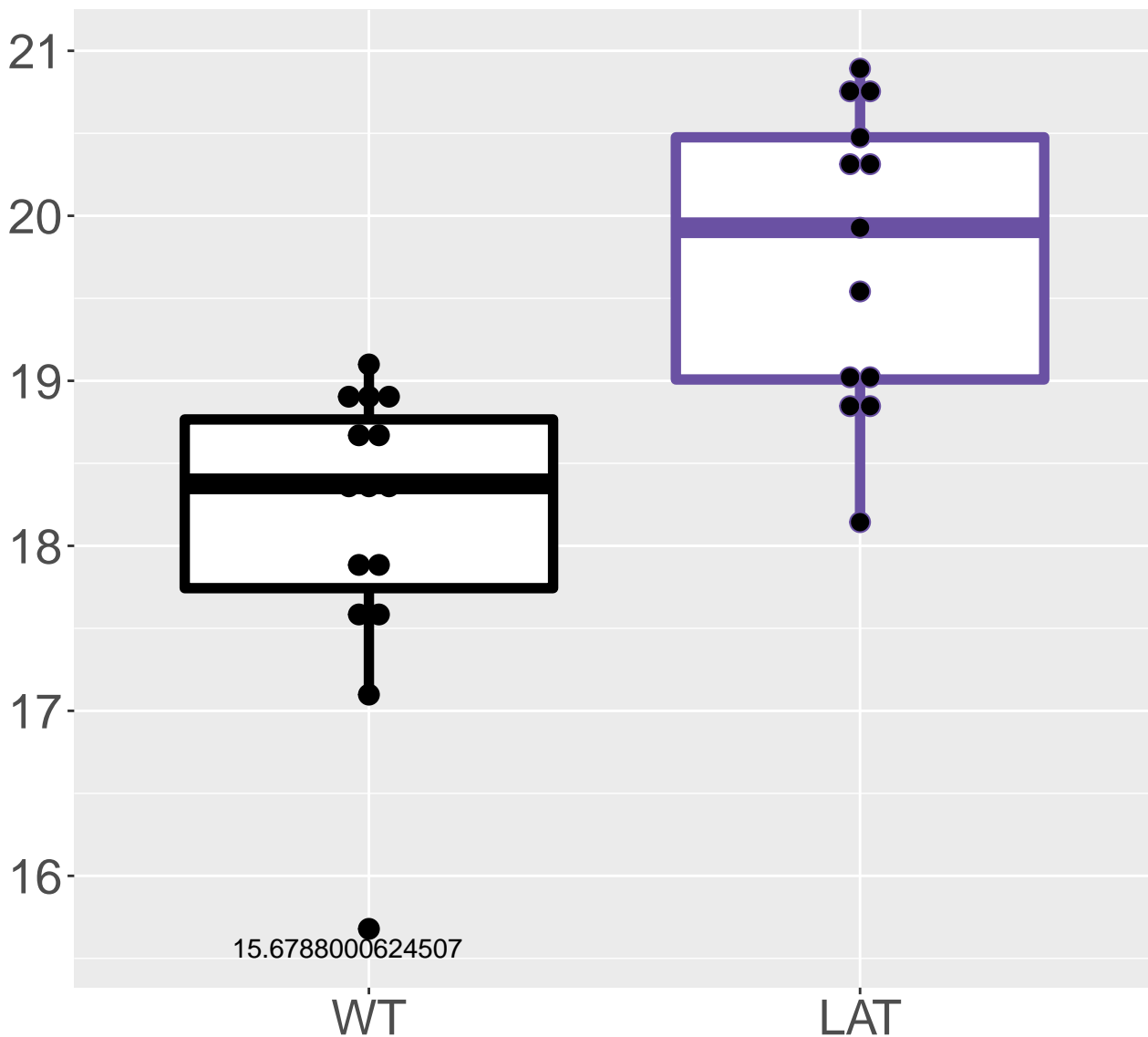
**M422.1576T172.16**

**FDR = 5e-04, FC = -1.8, sex\***



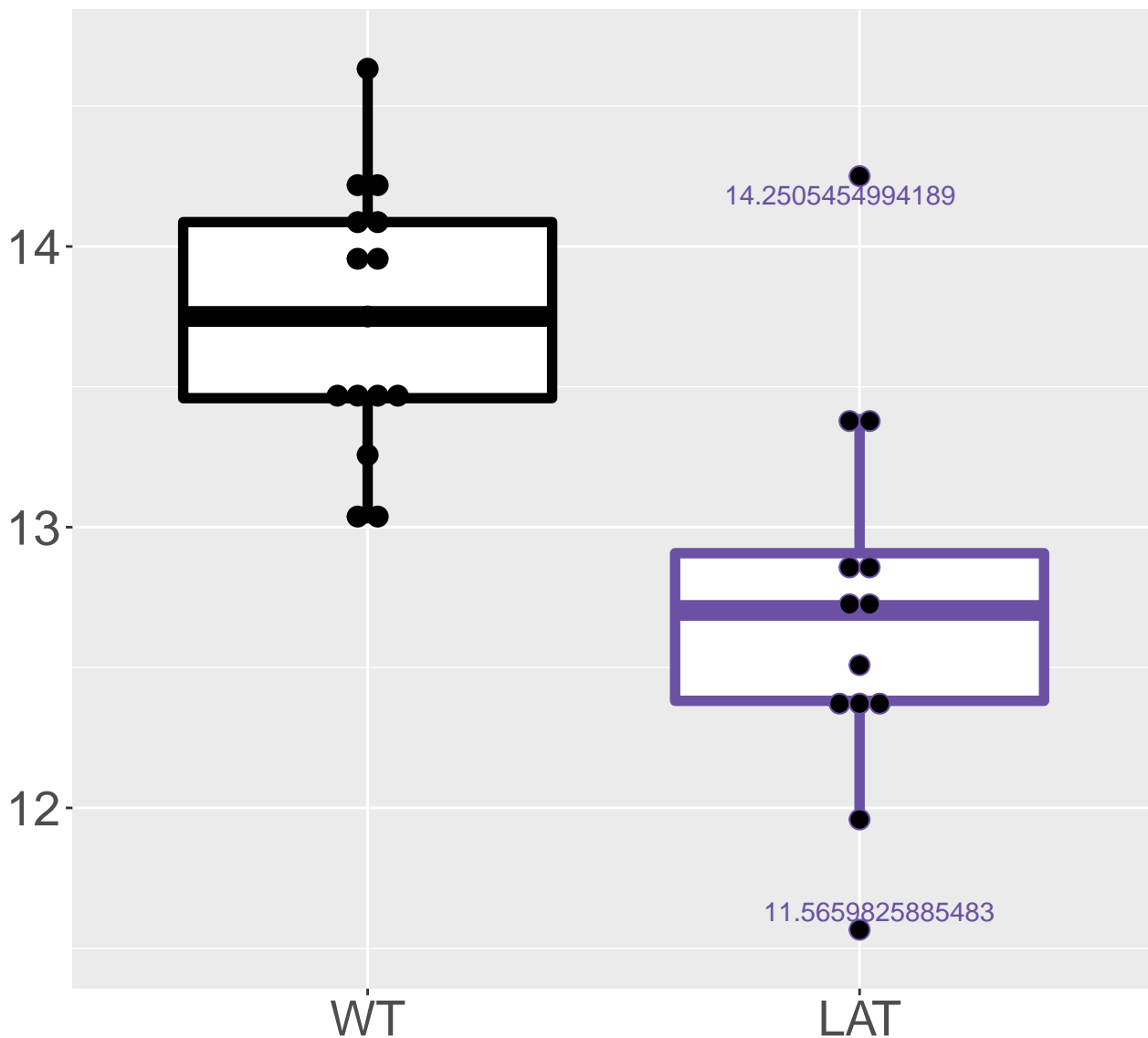


**M231.0277T547.31**  
**FDR = 5e-04, FC = 1.6**



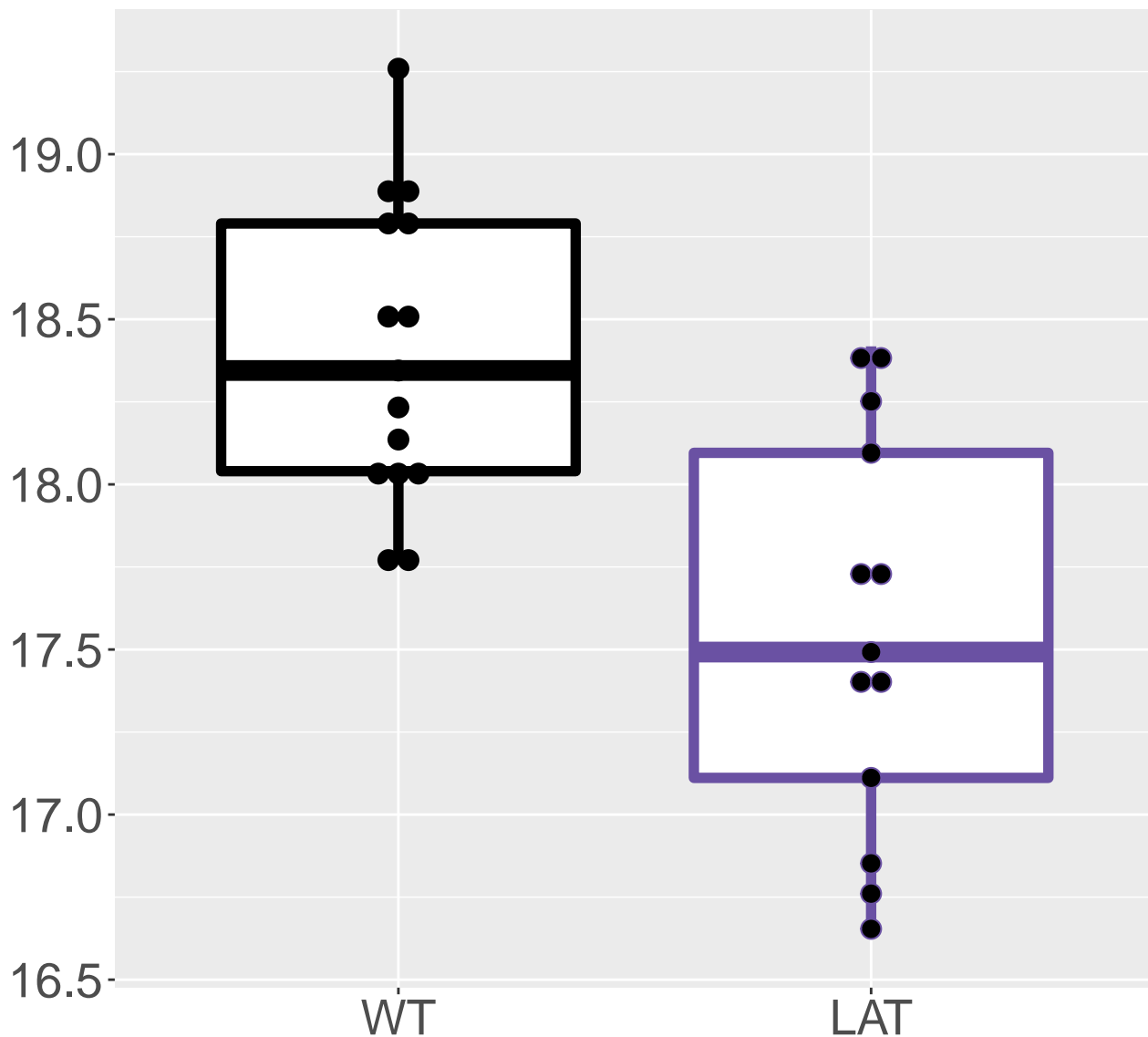
**M993.3302T640.36**

**FDR = 5e-04, FC = -1**



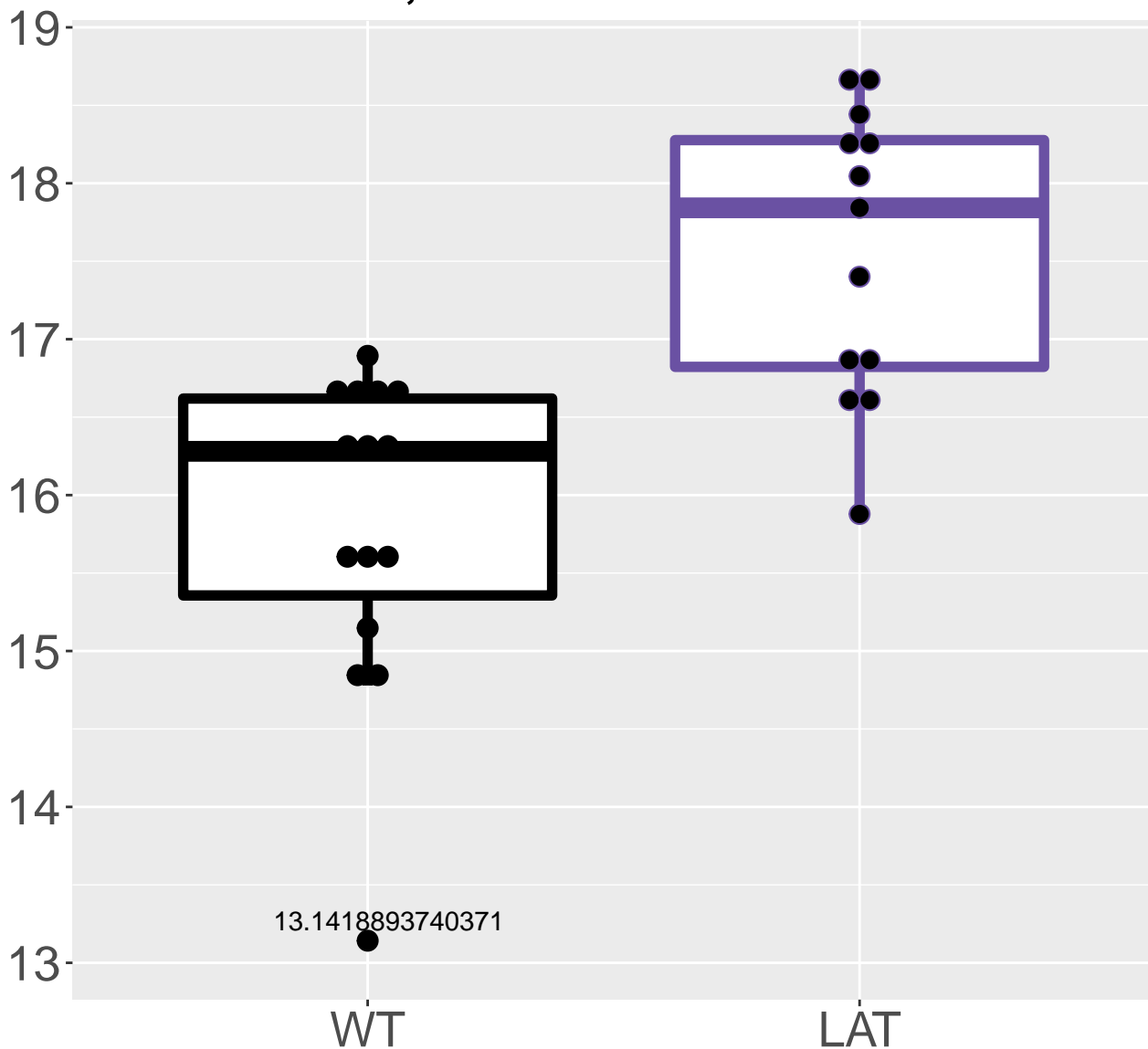
**M657.2132T526.61**

**FDR = 0.00051, FC = -0.84, sex\***



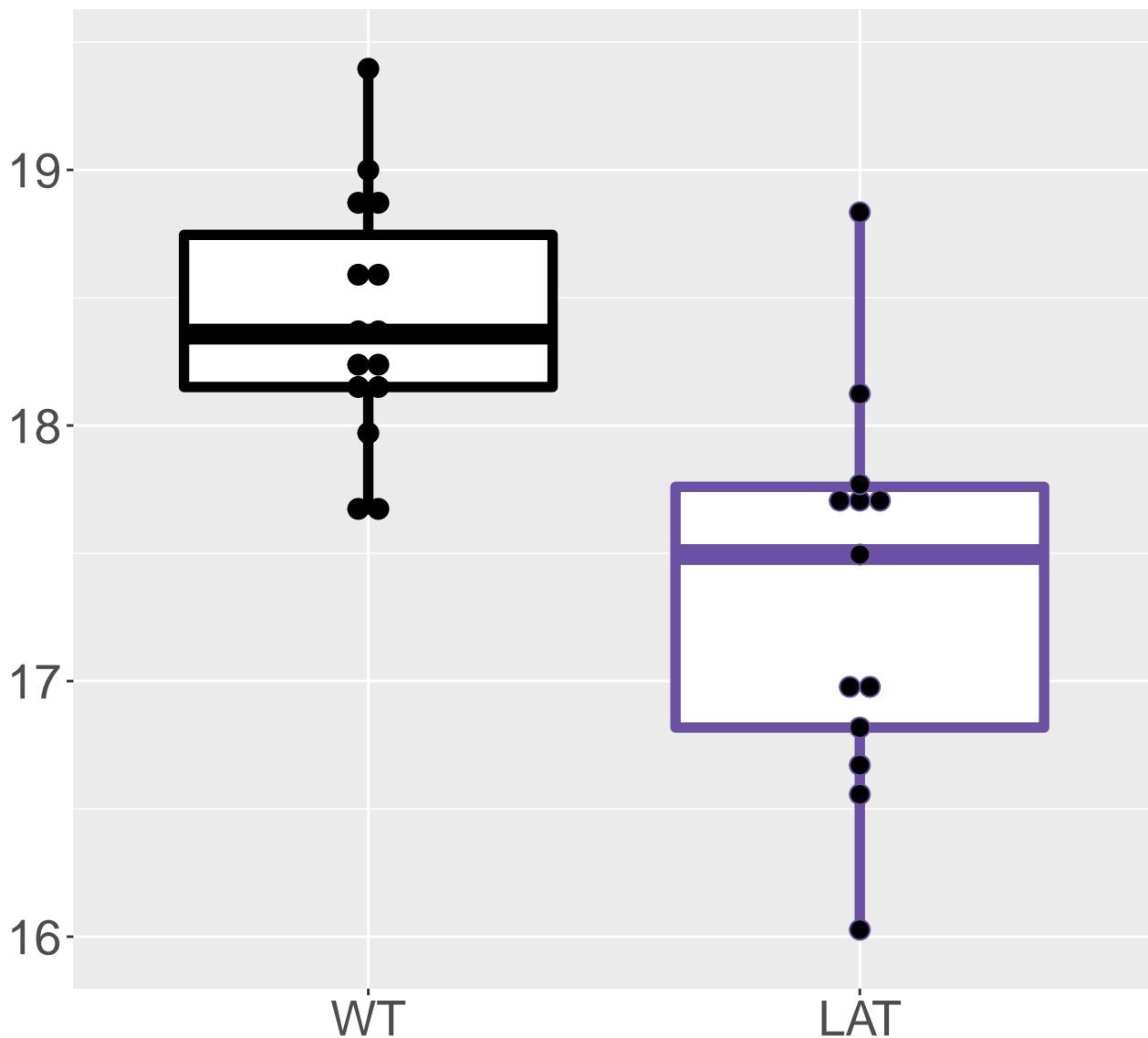
**M426.9818T548.83**

**FDR = 0.00052, FC = 1.7**



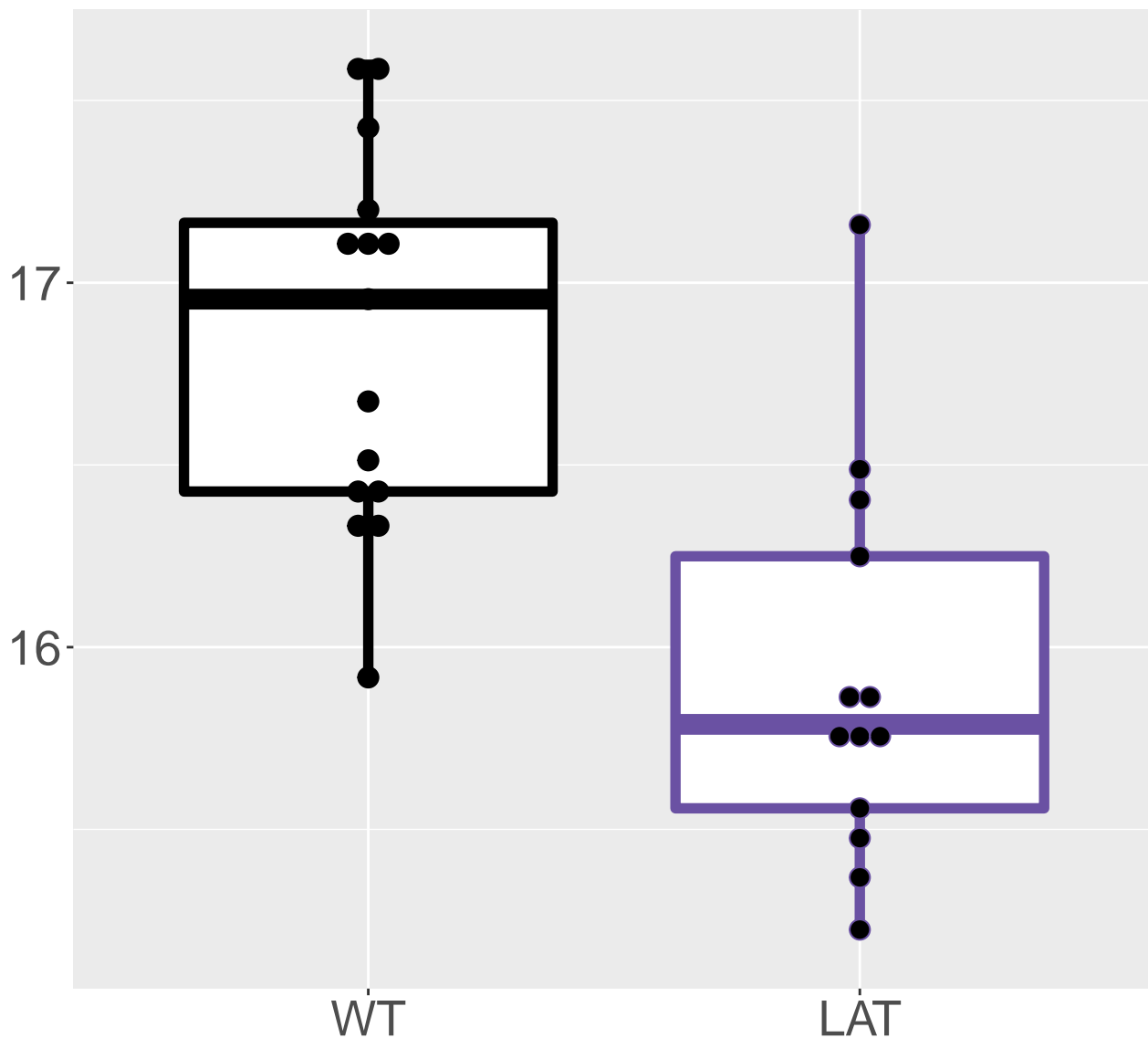
**M782.2061T543.01**

**FDR = 0.00056, FC = -1.1**

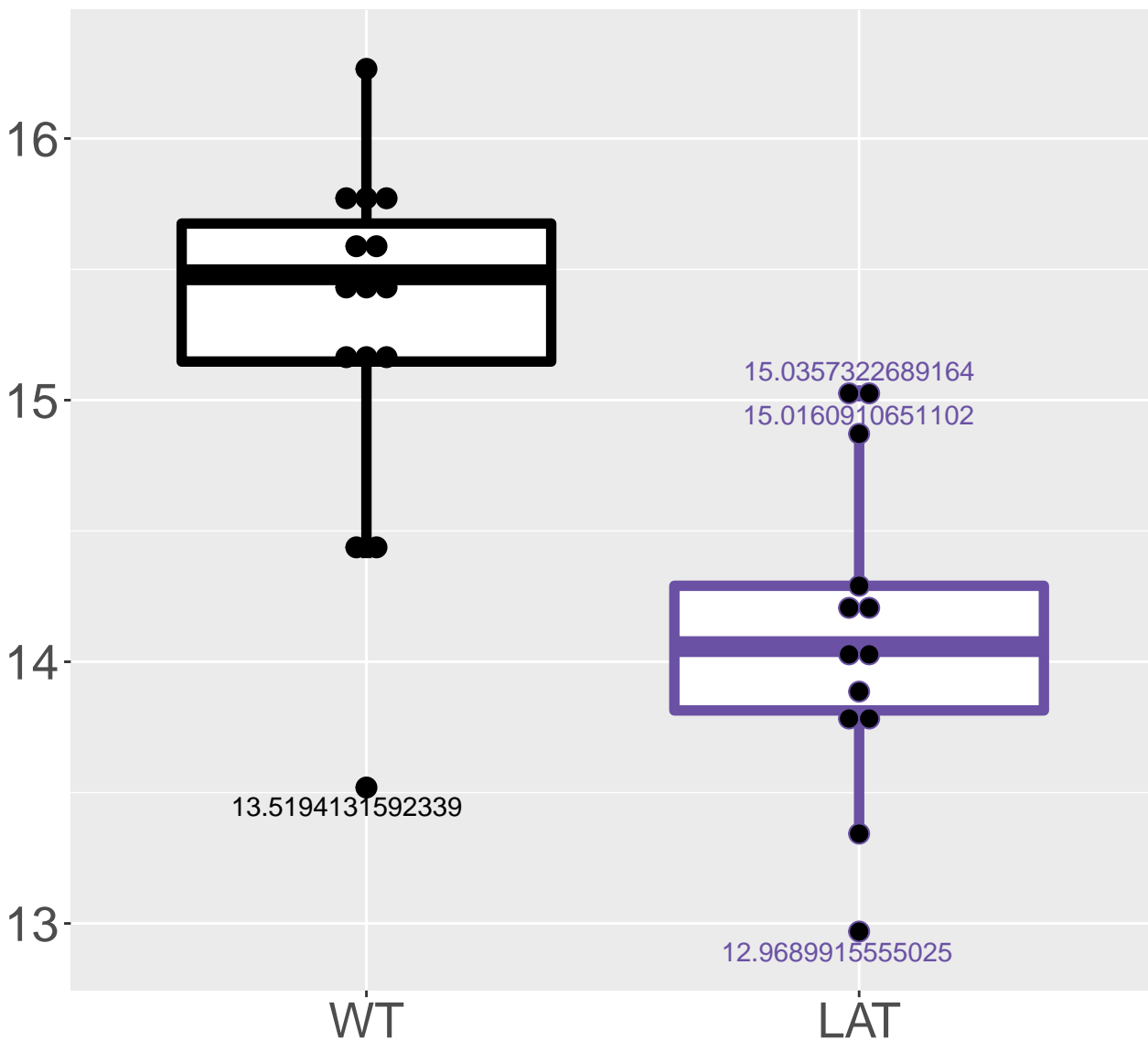


**M525.1673T639.3\_2**

**FDR = 0.00056, FC = -0.93**

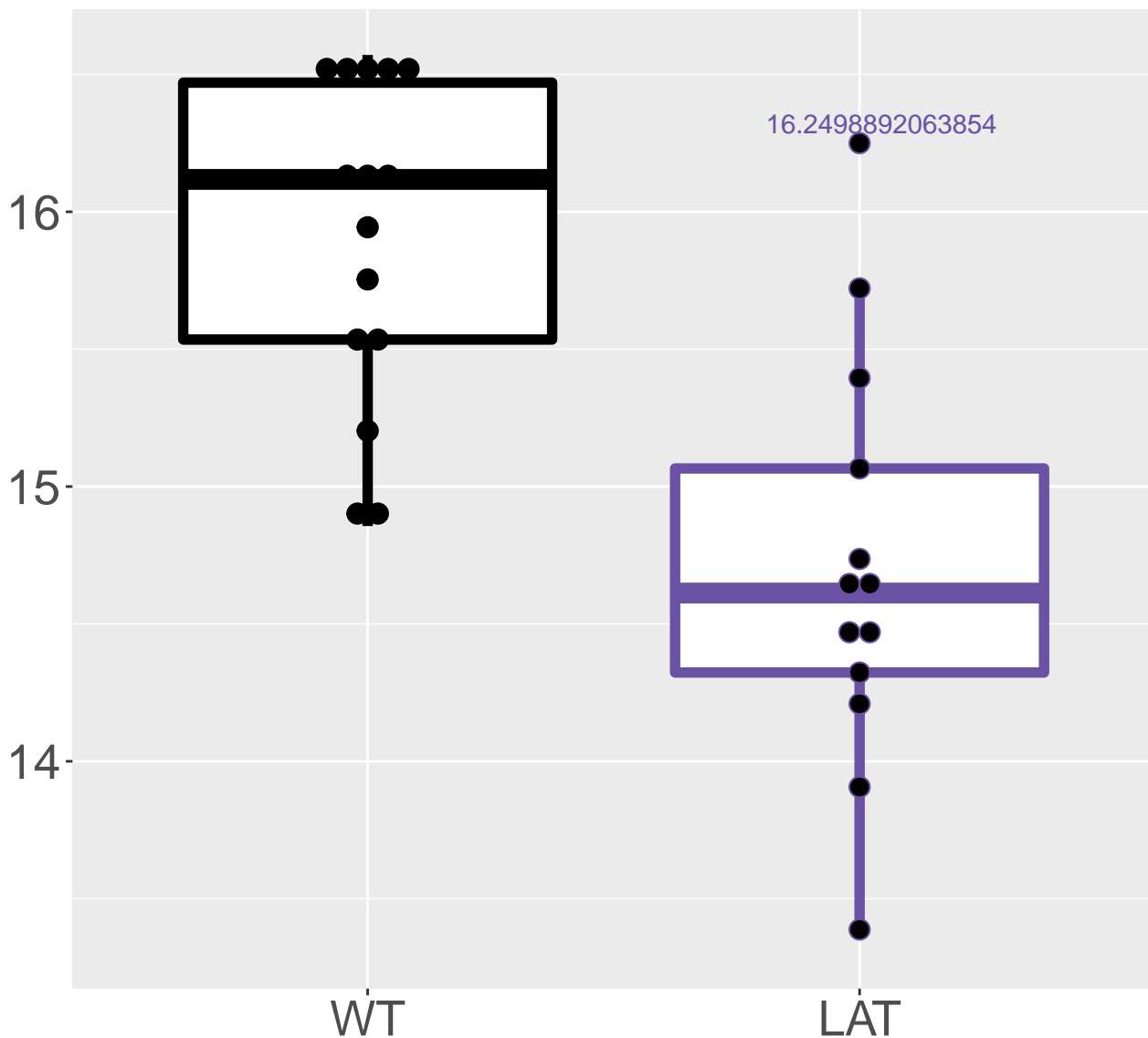


**FDR = 0.00056, FC = -1.2**



**M419.449T621.57**

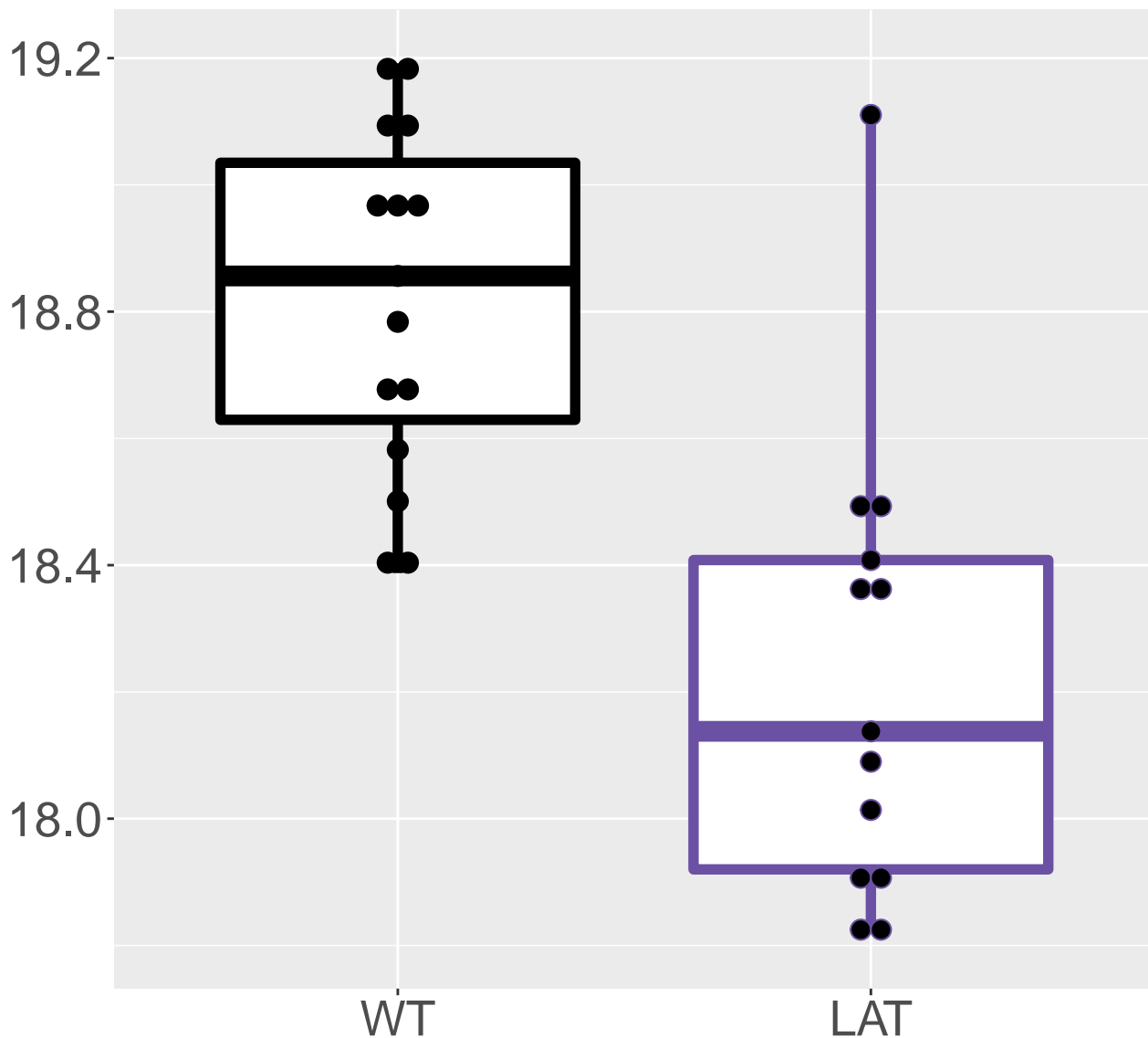
**FDR = 0.00057, FC = -1.2**





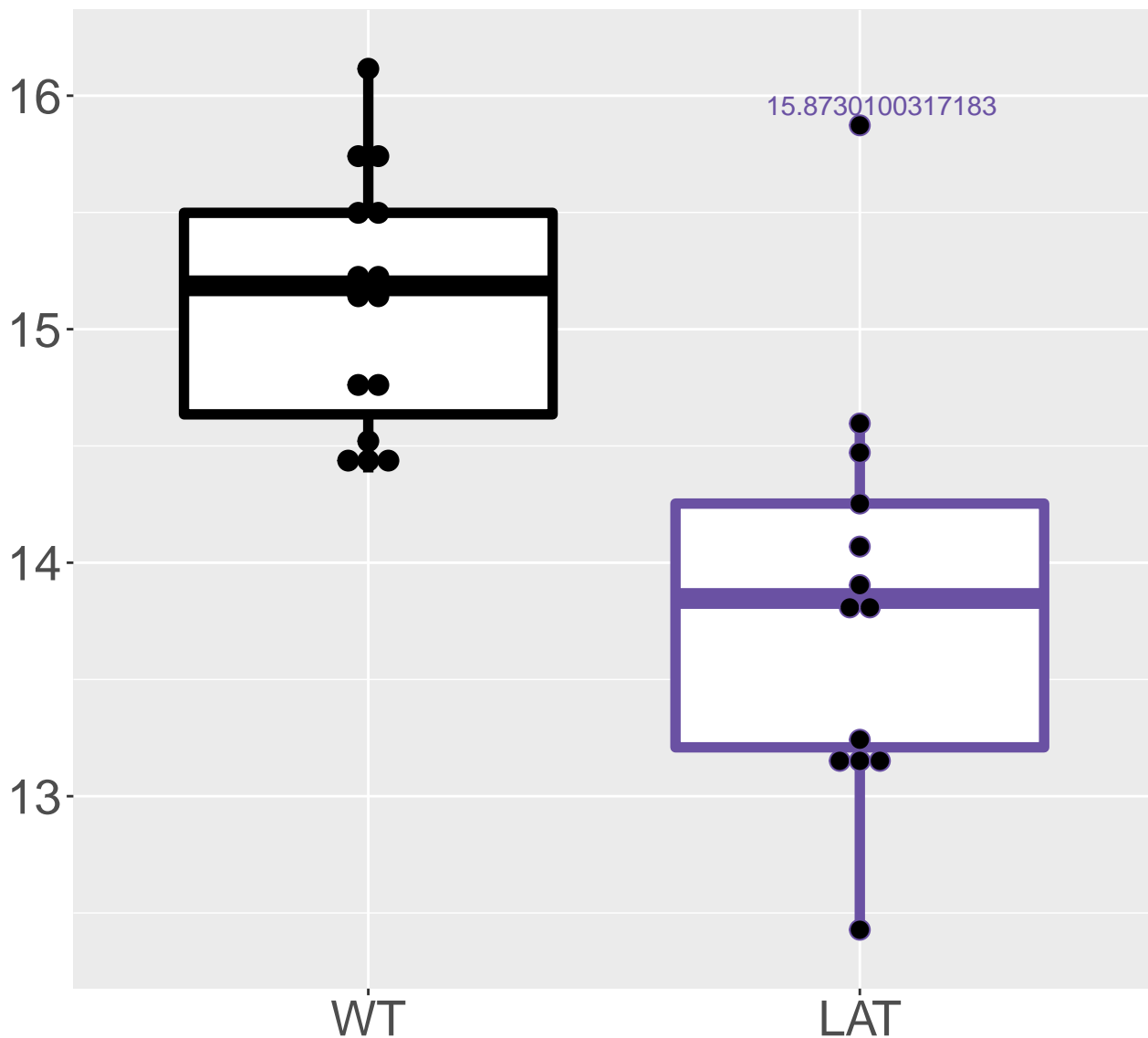
**M384.1236T577.93**

**FDR = 0.00057, FC = -0.6**



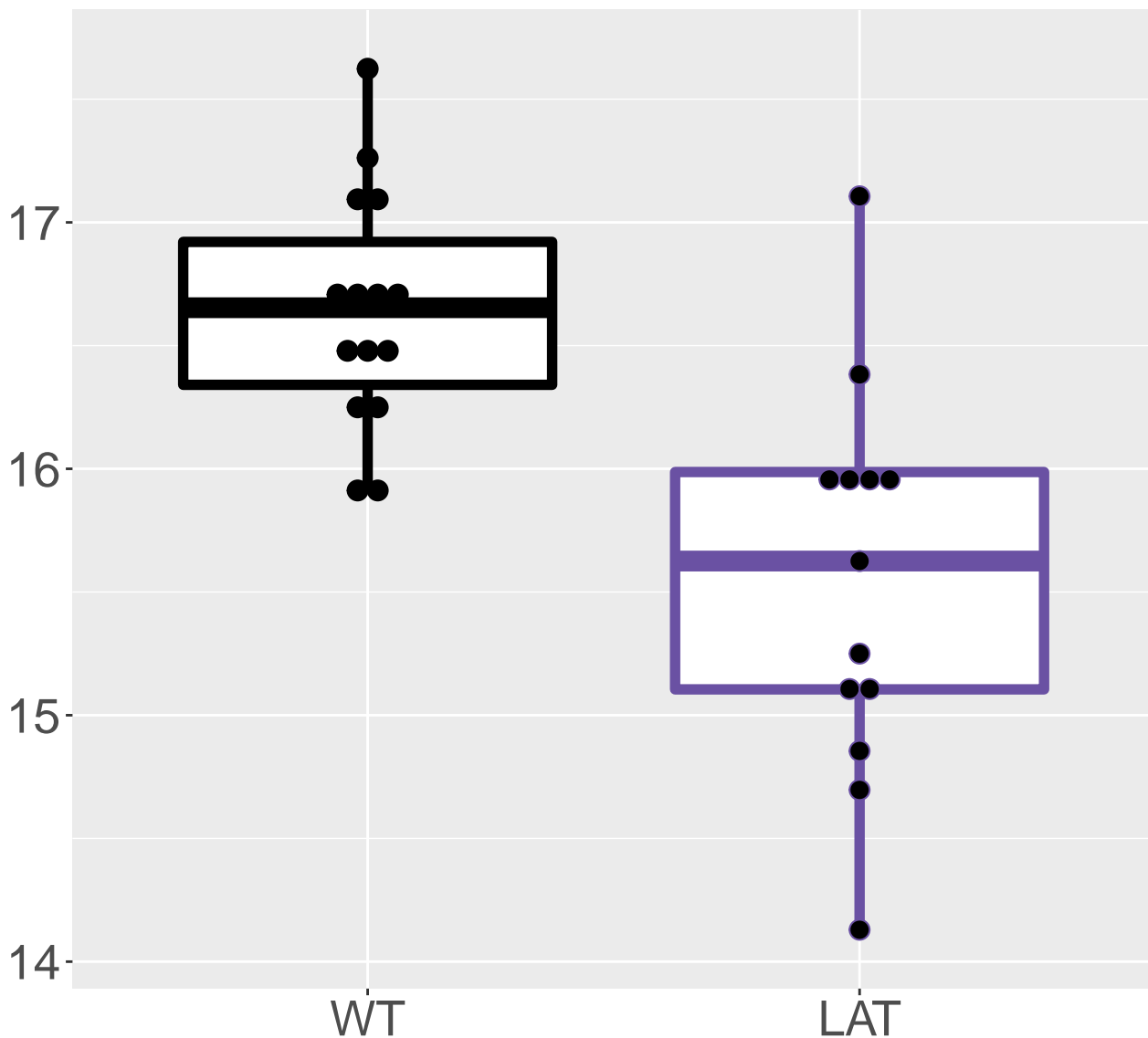
**M687.2207T659.89\_2**

**FDR = 0.00058, FC = -1.3**



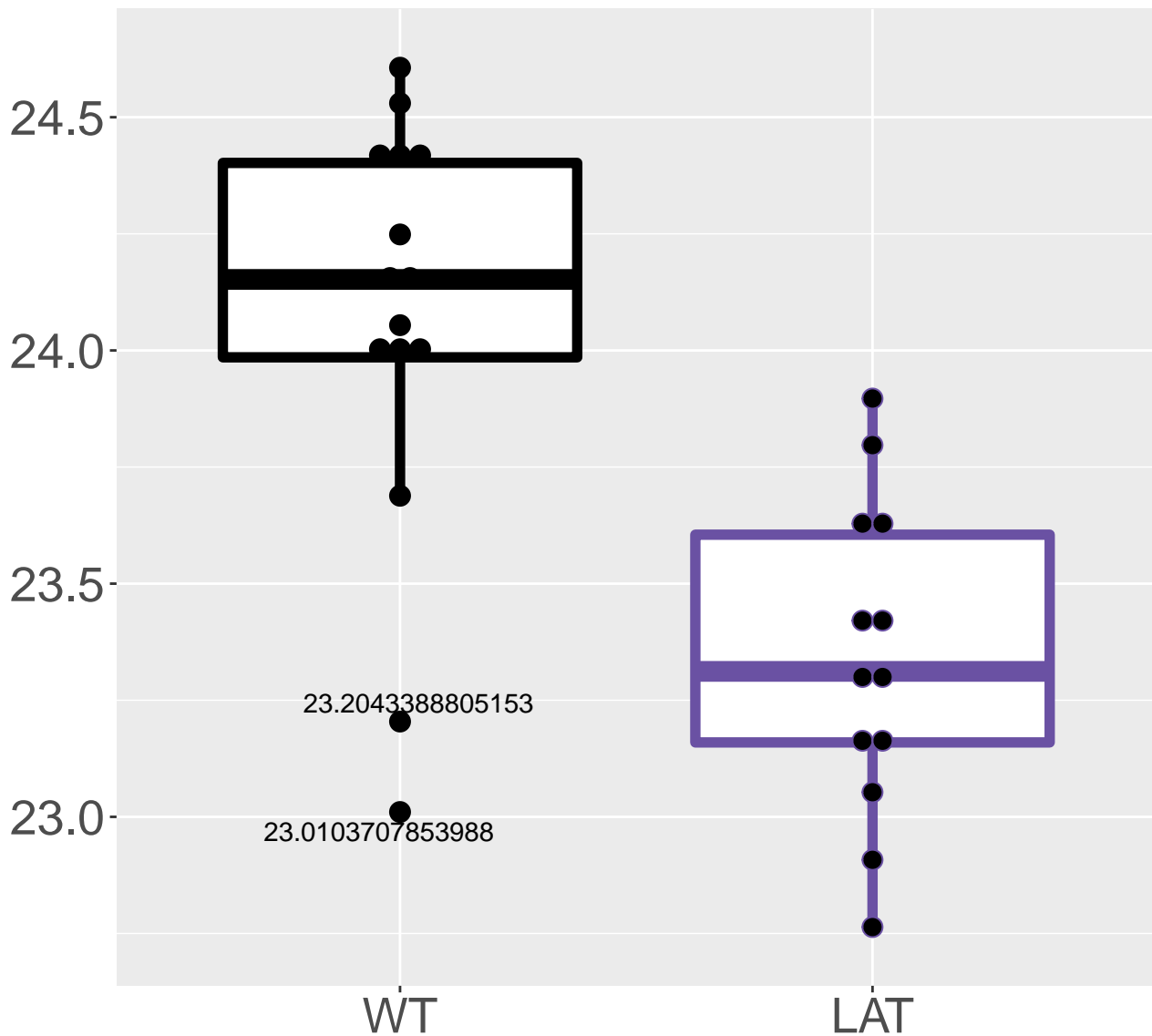
**M783.2079T542.95**

**FDR = 0.00058, FC = -1.1**



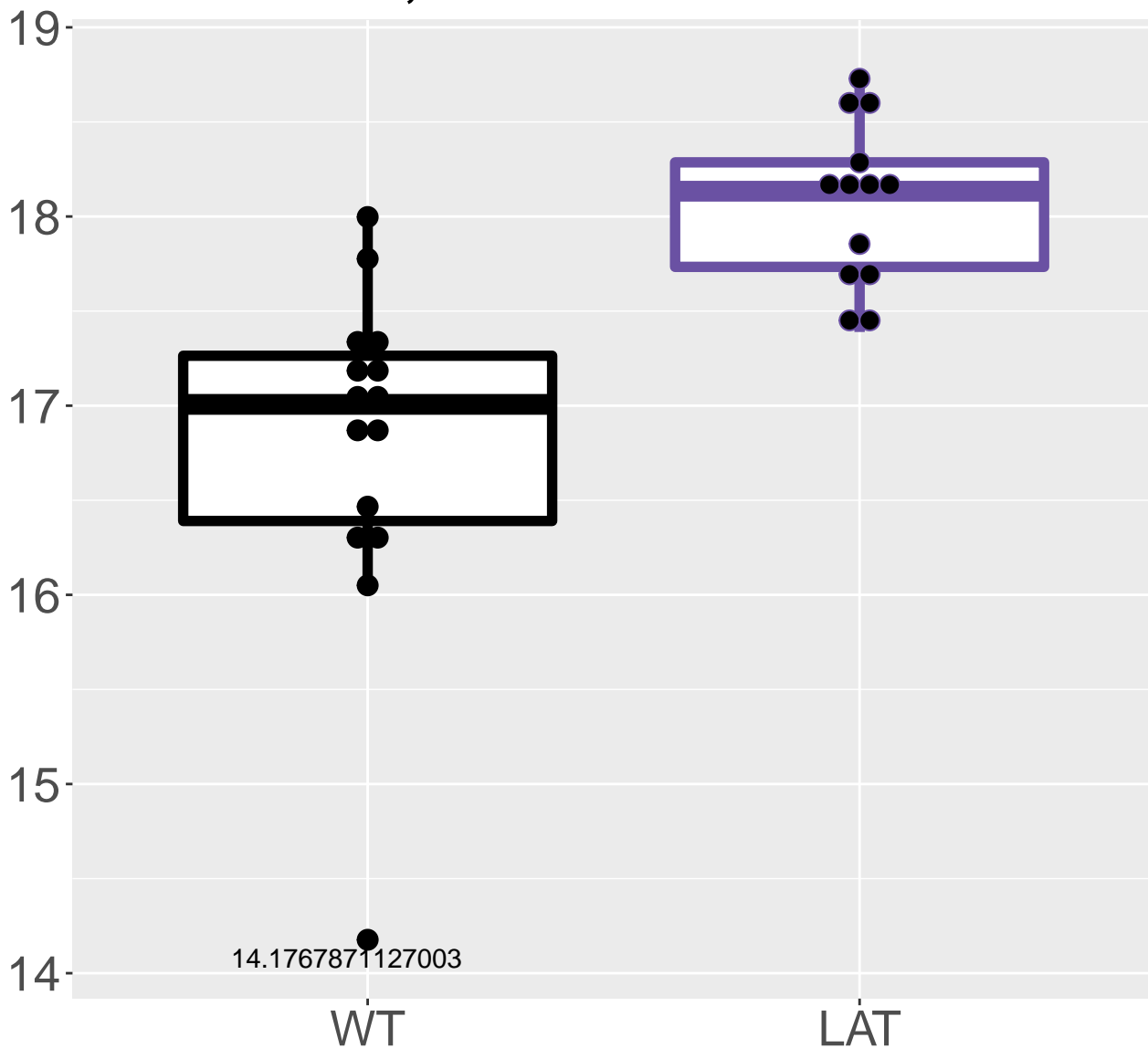
**M311.1101T469.98**

**FDR = 0.00059, FC = -0.72**



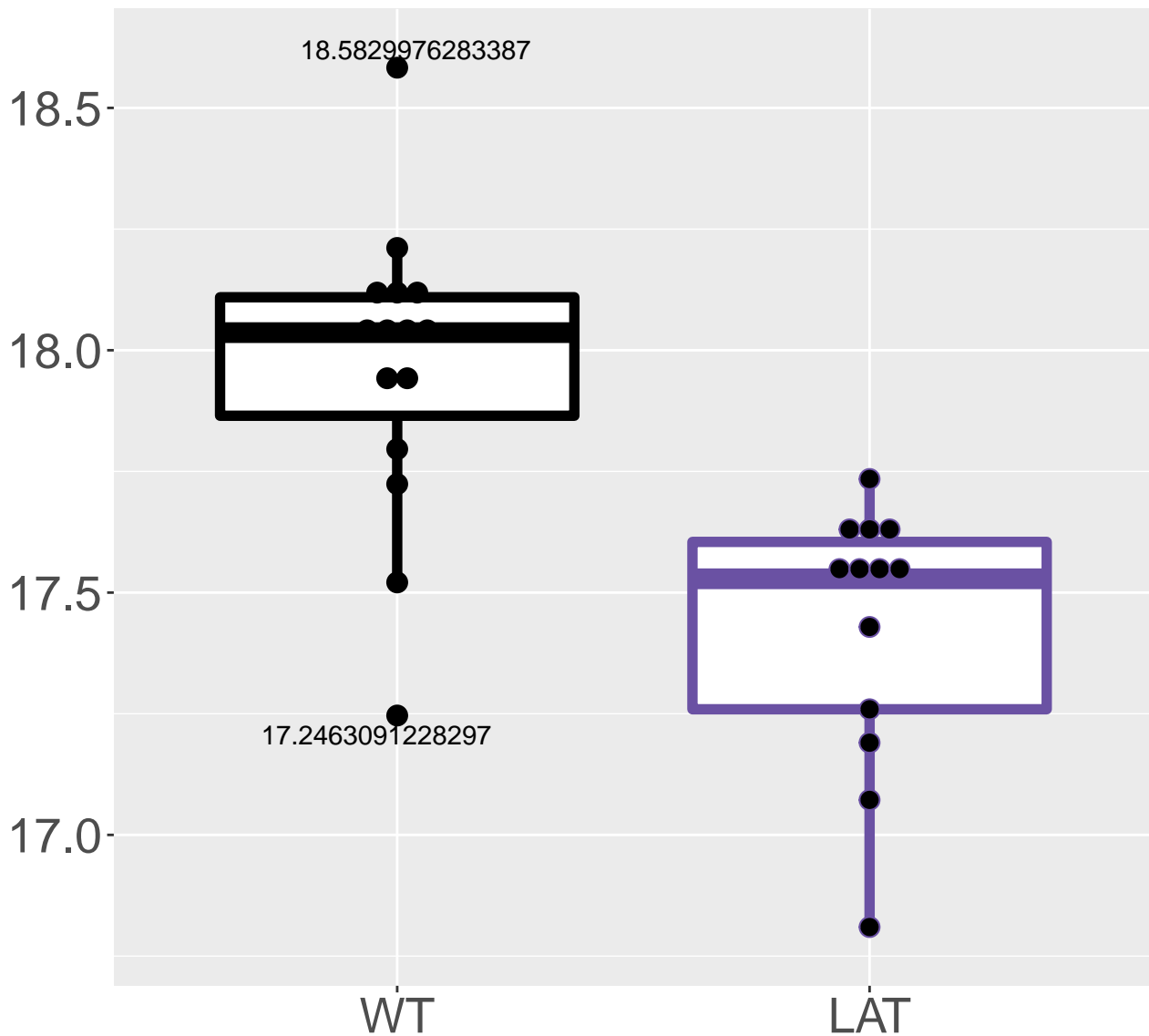
**M508.1292T389.87**

**FDR = 0.00061, FC = 1.3**



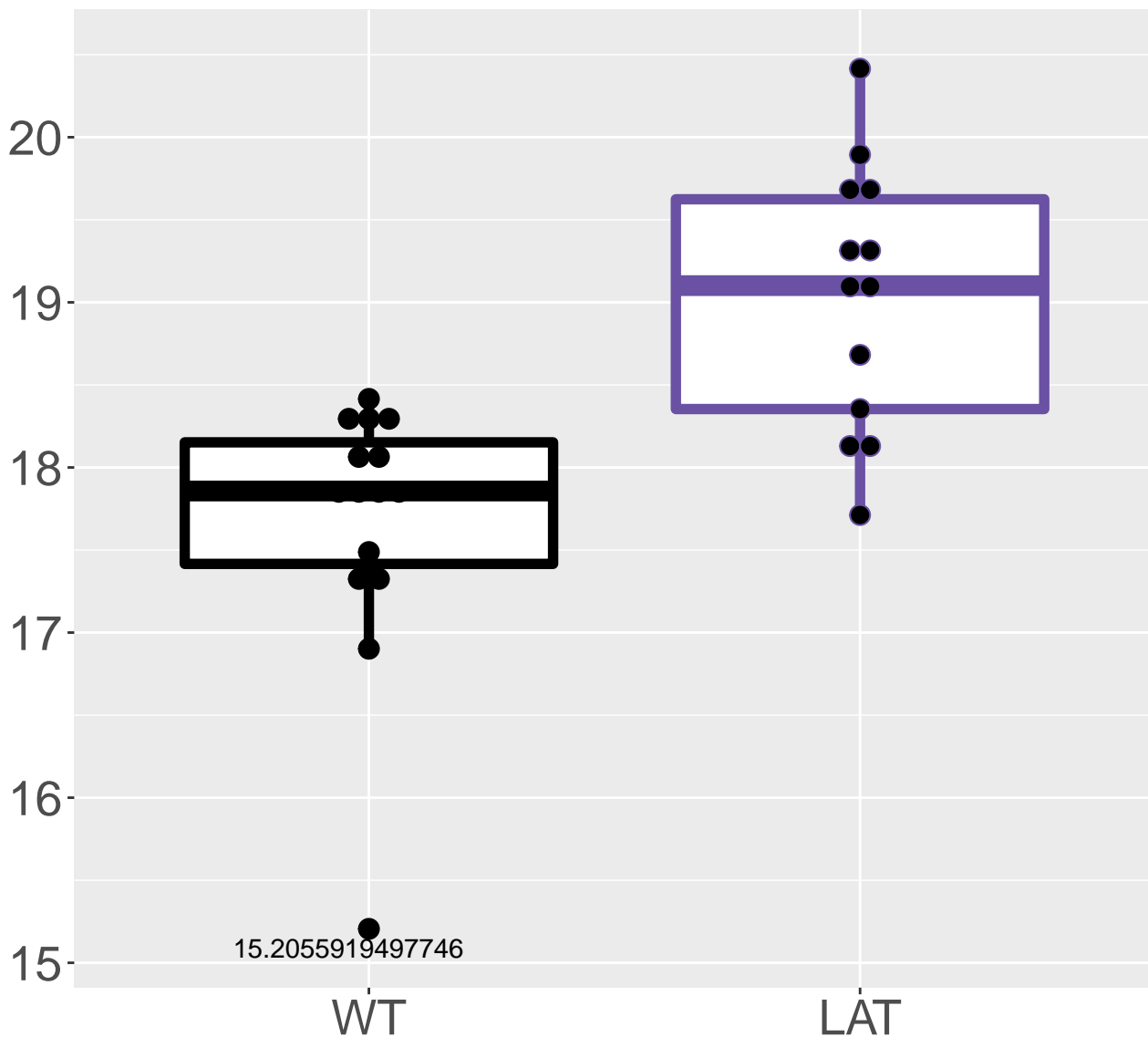
**M166.0775T174.35**

**FDR = 0.00061, FC = -0.54**



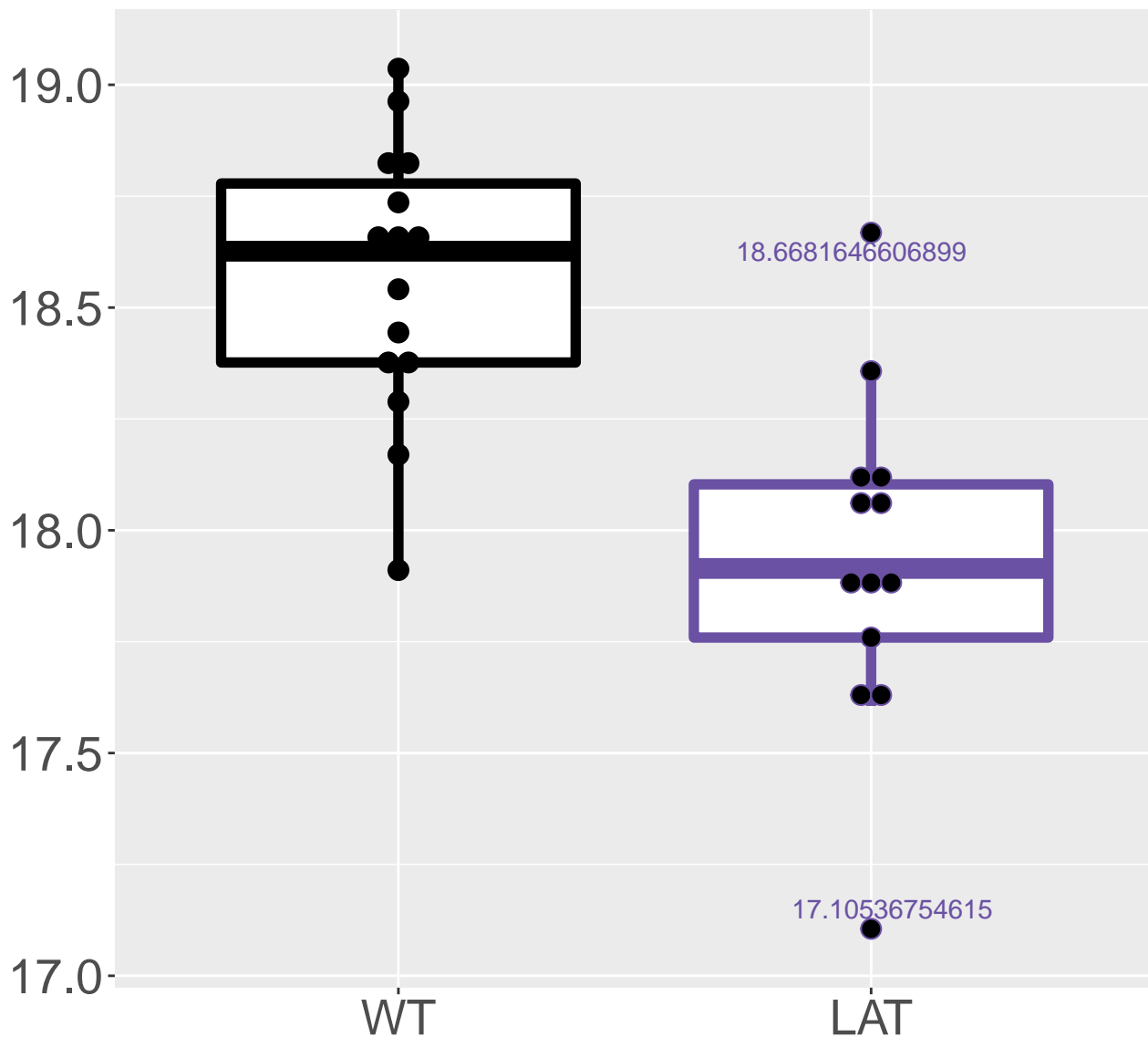
**M134.0474T569.14**

**FDR = 0.00063, FC = 1.4**



**M187.003T374.17**

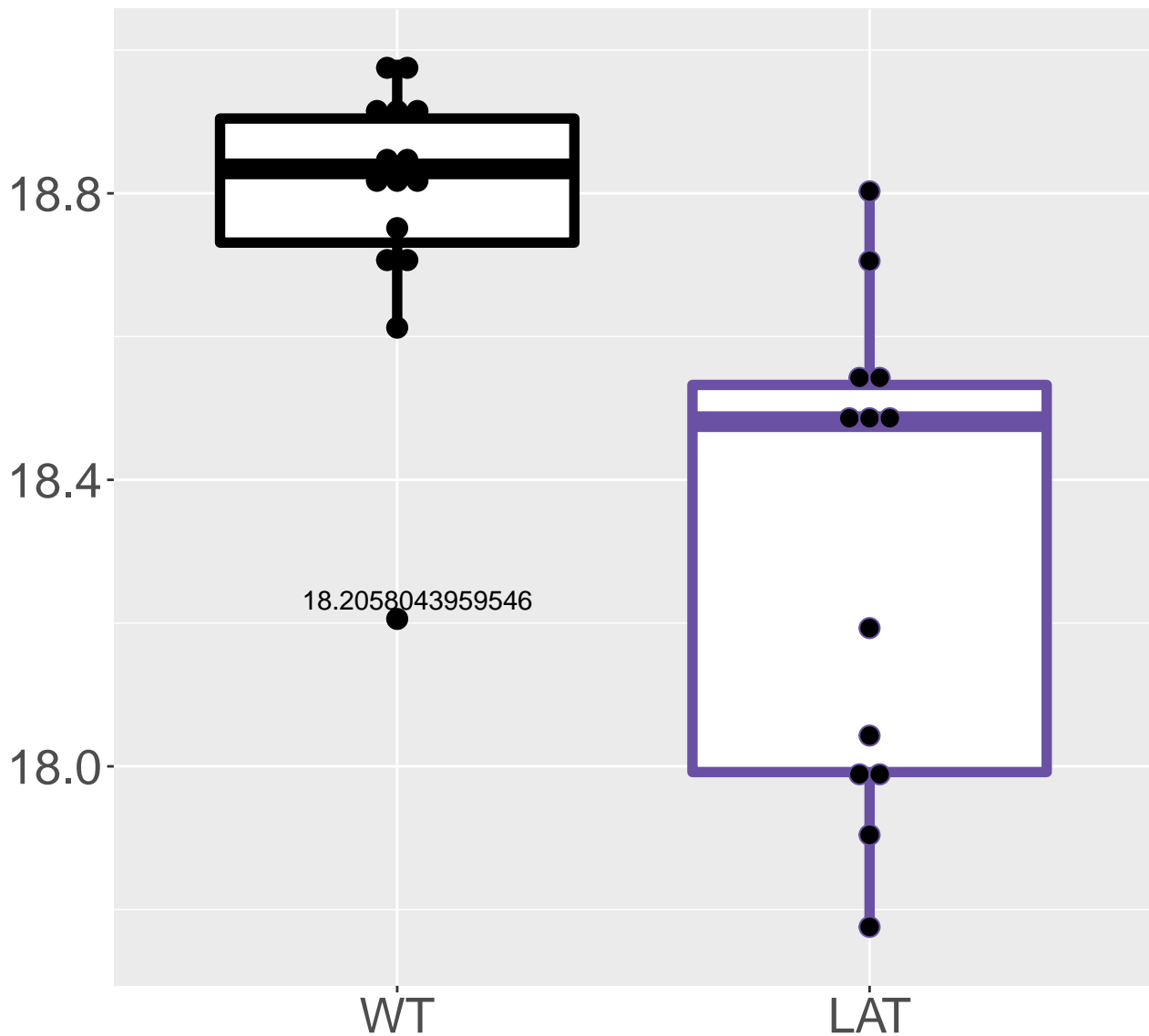
**FDR = 0.00063, FC = -0.63**





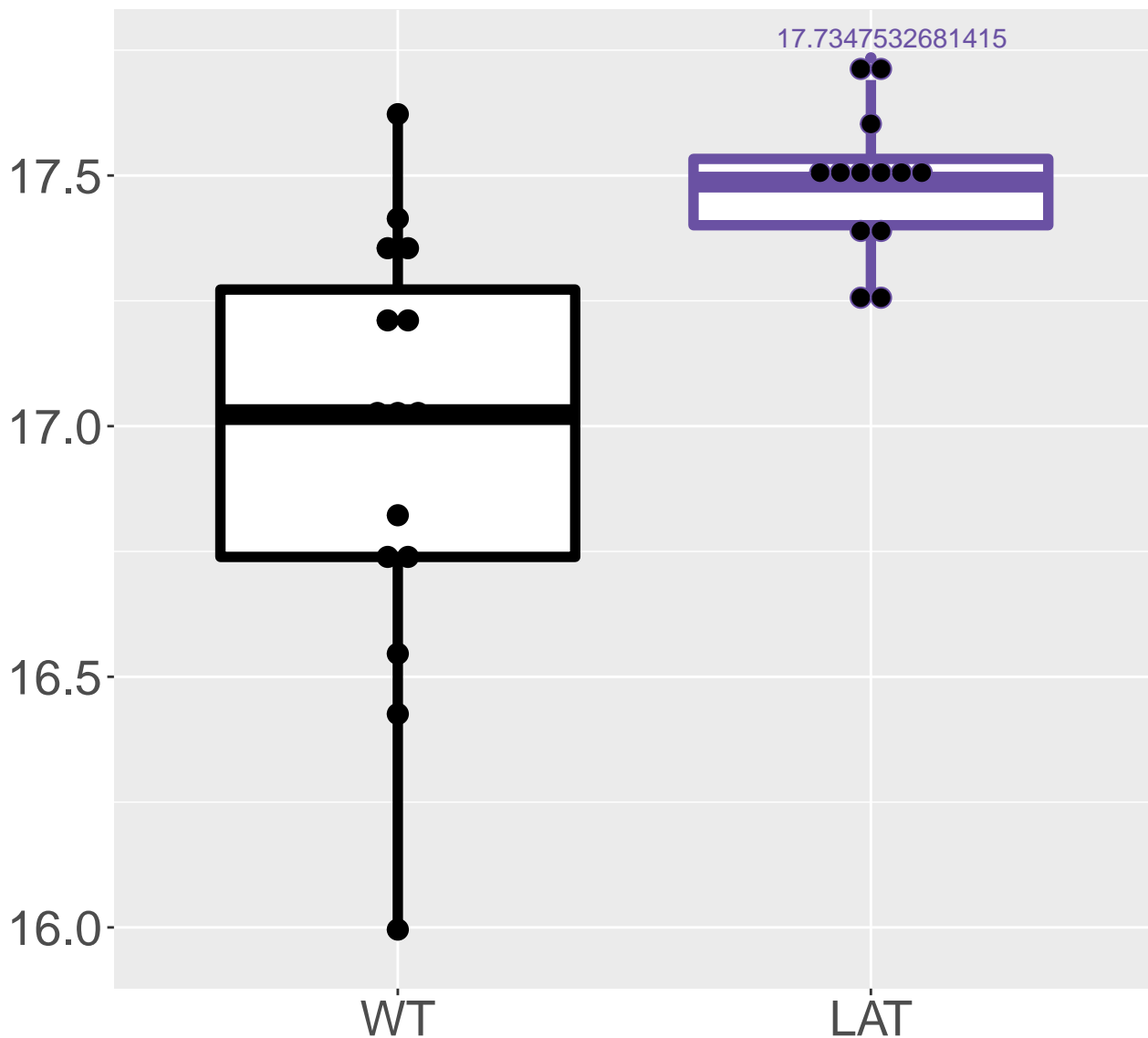
**M153.0304T349.03**

**FDR = 0.00063, FC = -0.48**



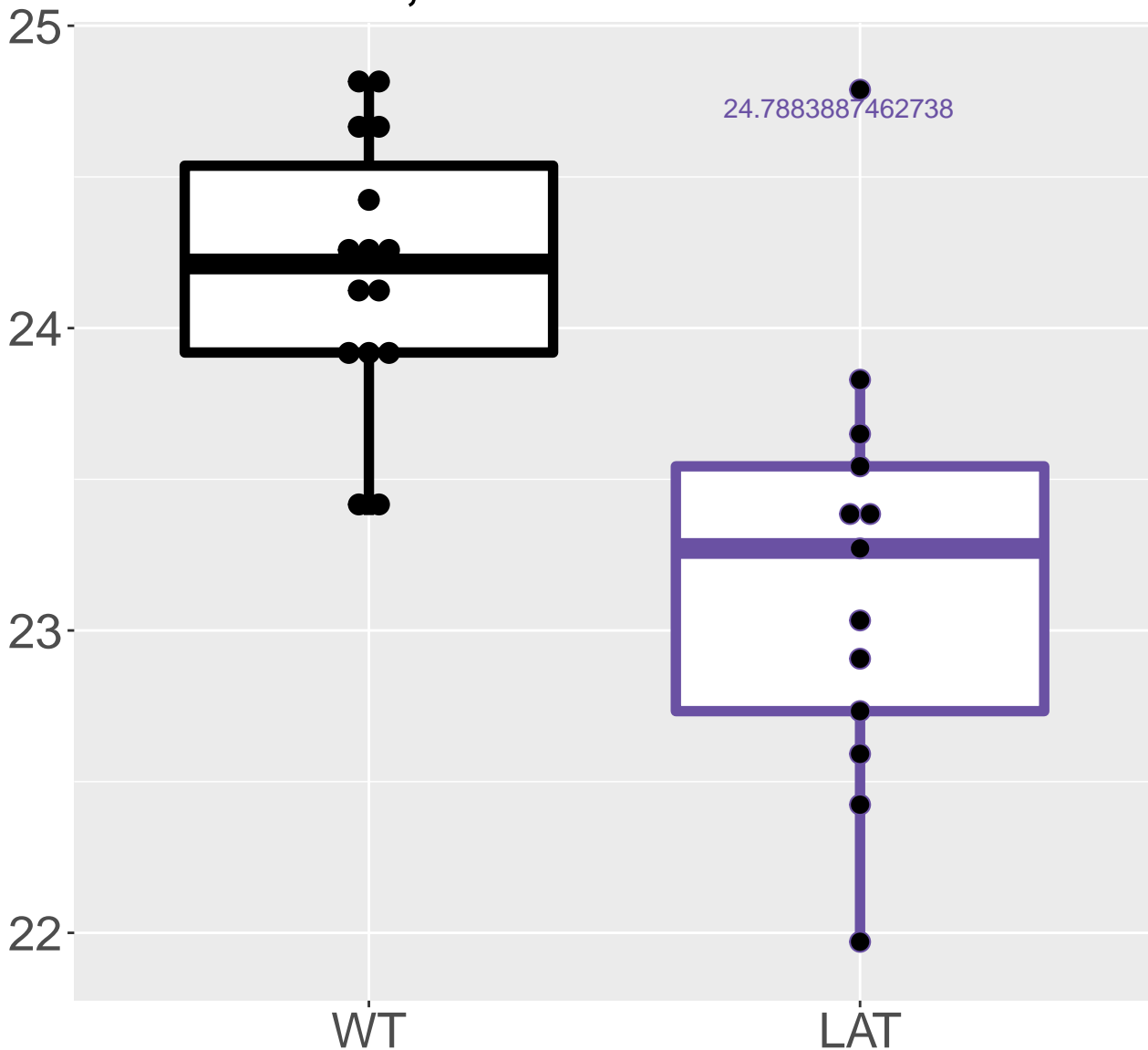
# Pyridoxamine 5'-phosphate

FDR = 0.00065, FC = 0.52

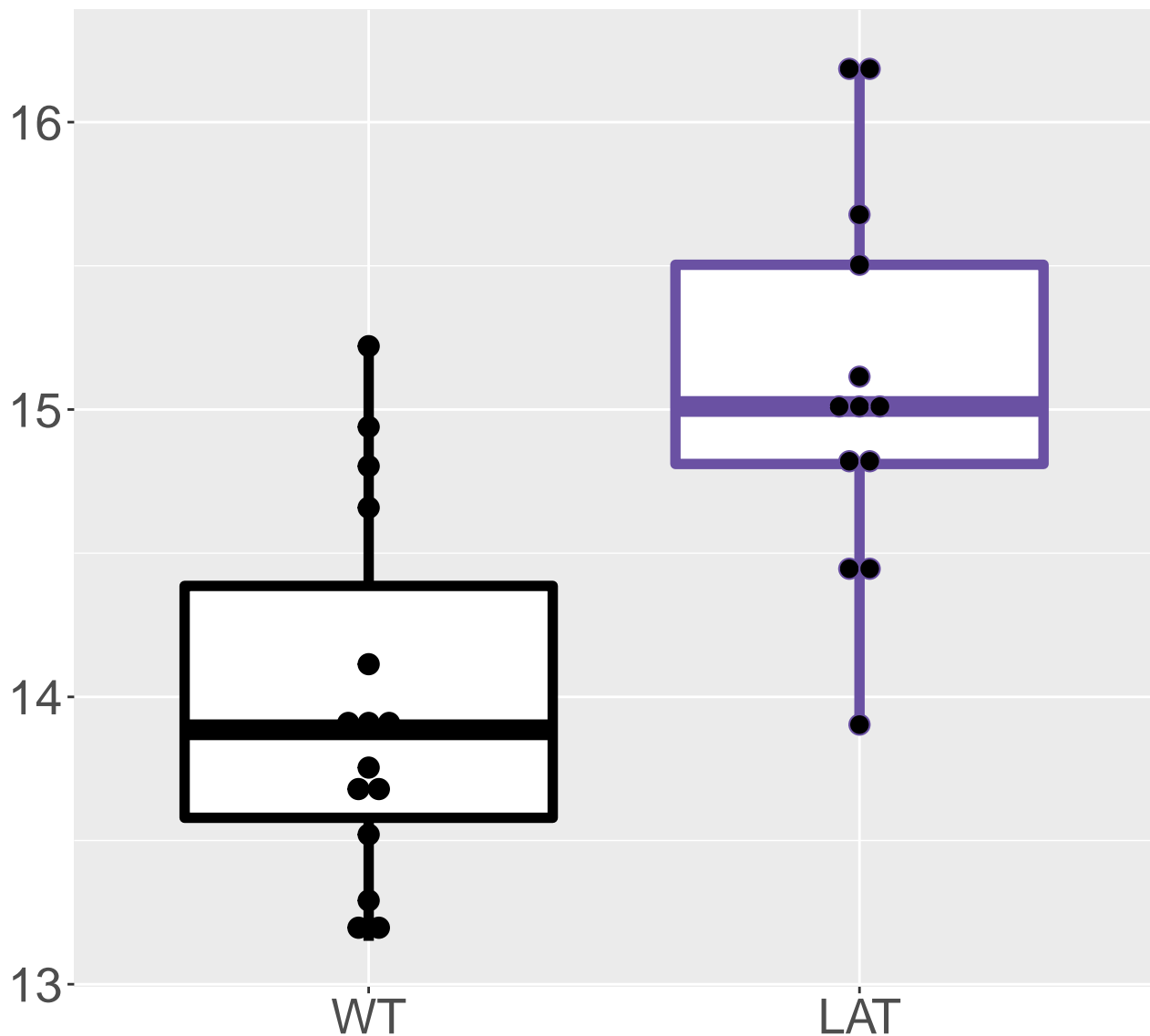


**M683.2263T536.73**

**FDR = 0.00065, FC = -1**

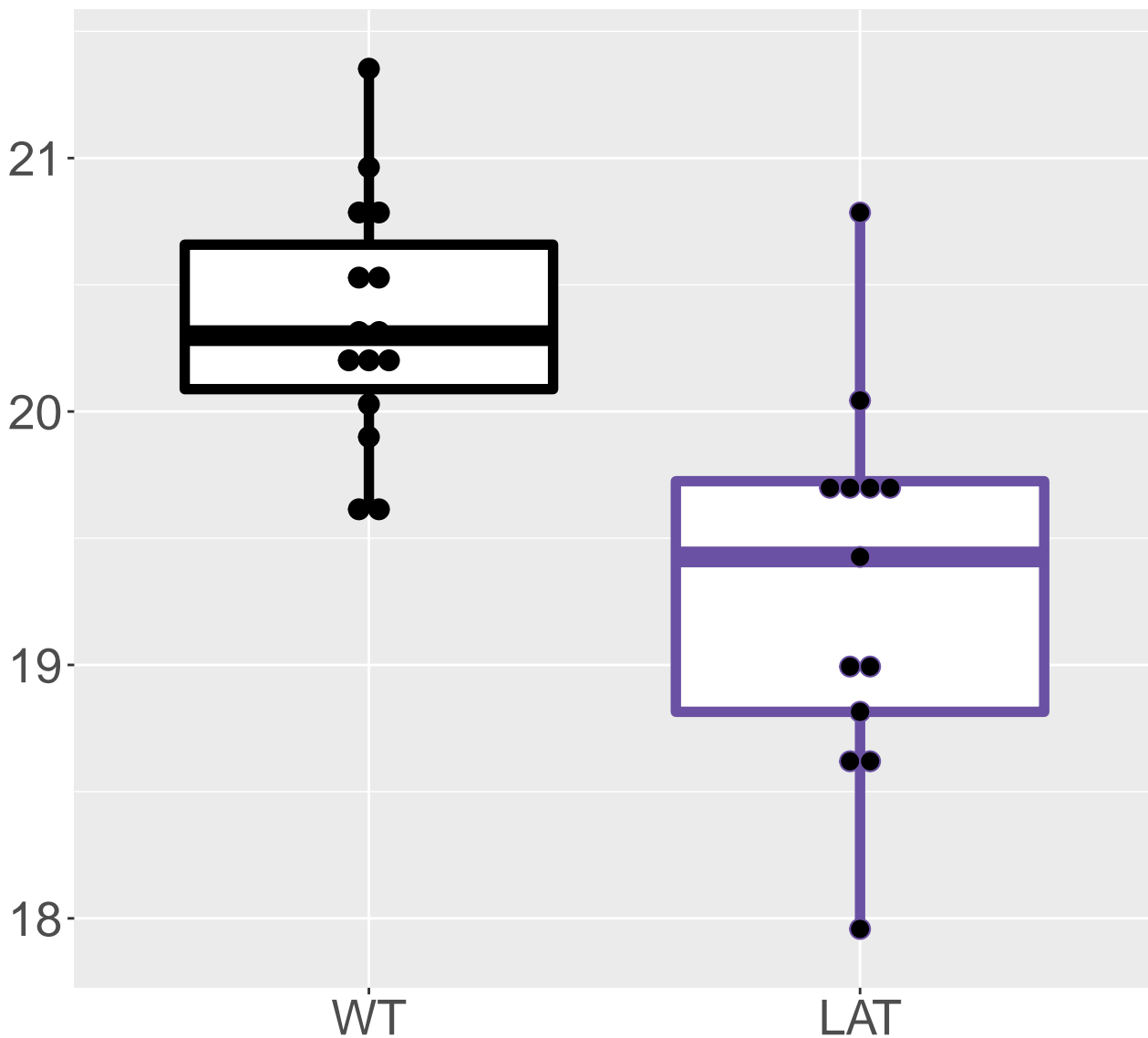


**GTP;Guanosine triphosphate;5'-GTP;Guanosin**  
**FDR = 0.00066, FC = 1.1**



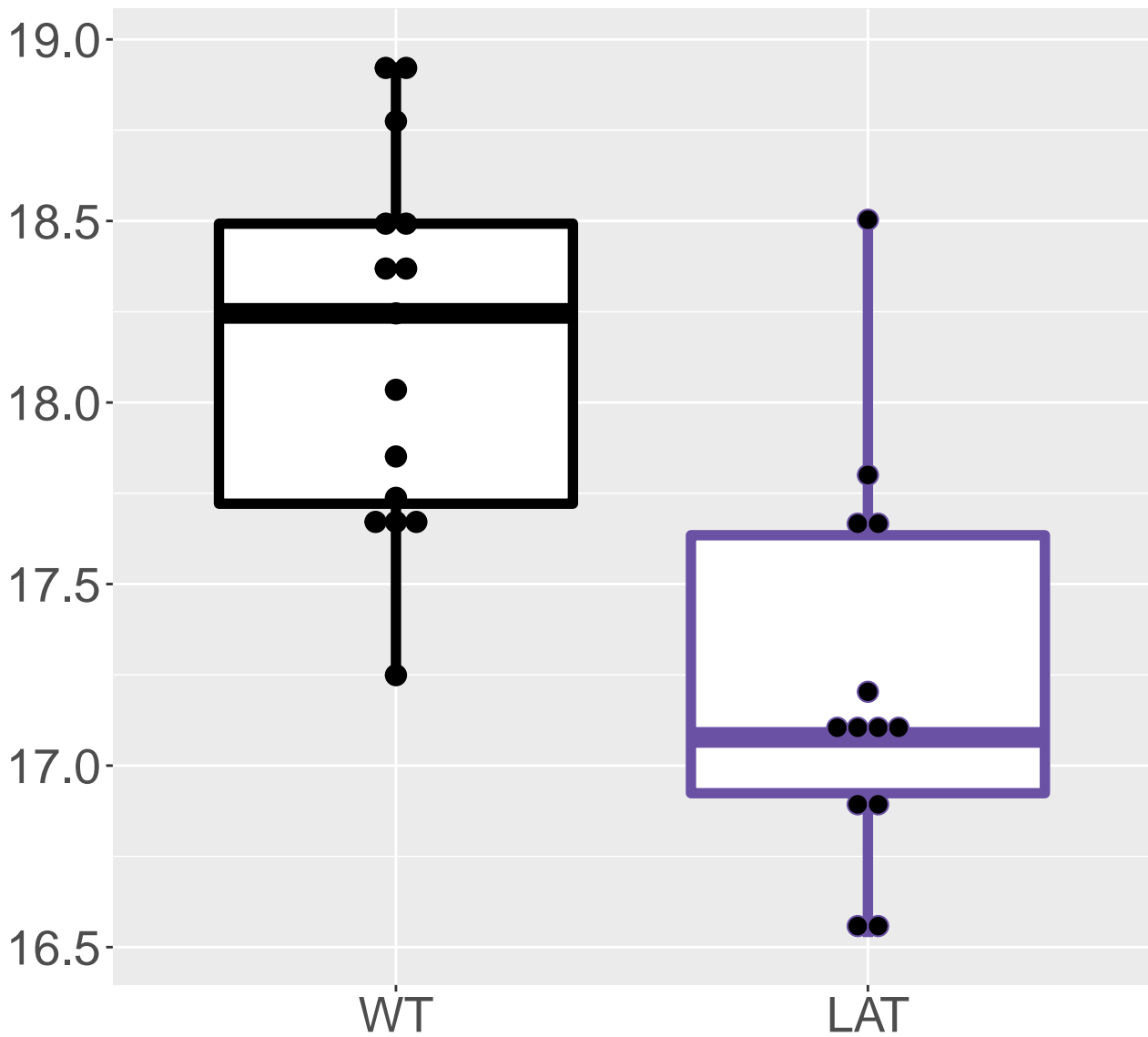
**M781.2026T543.04**

**FDR = 0.00066, FC = -1**



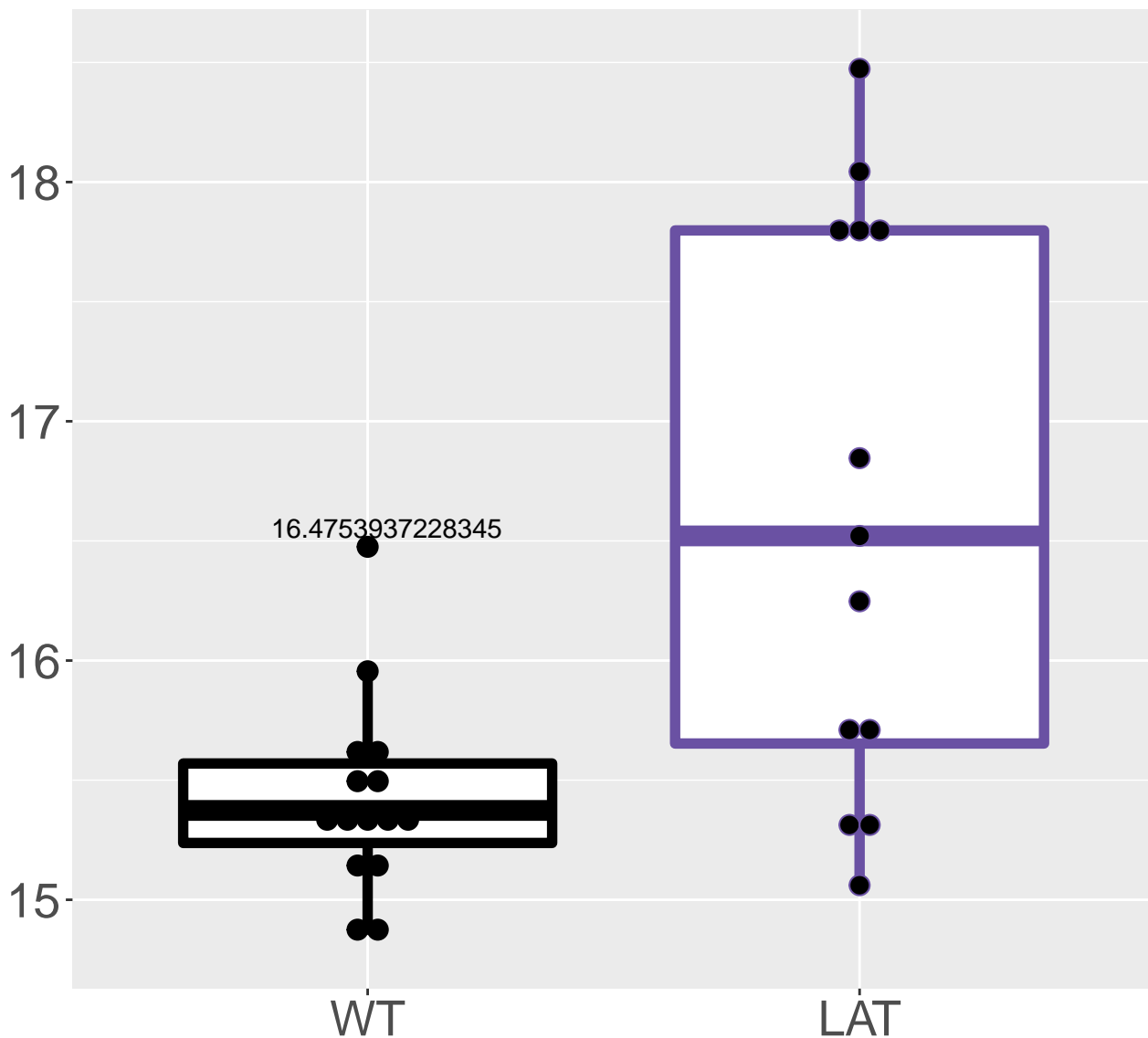
**M524.6654T639.15\_1**

**FDR = 0.00066, FC = -0.93**



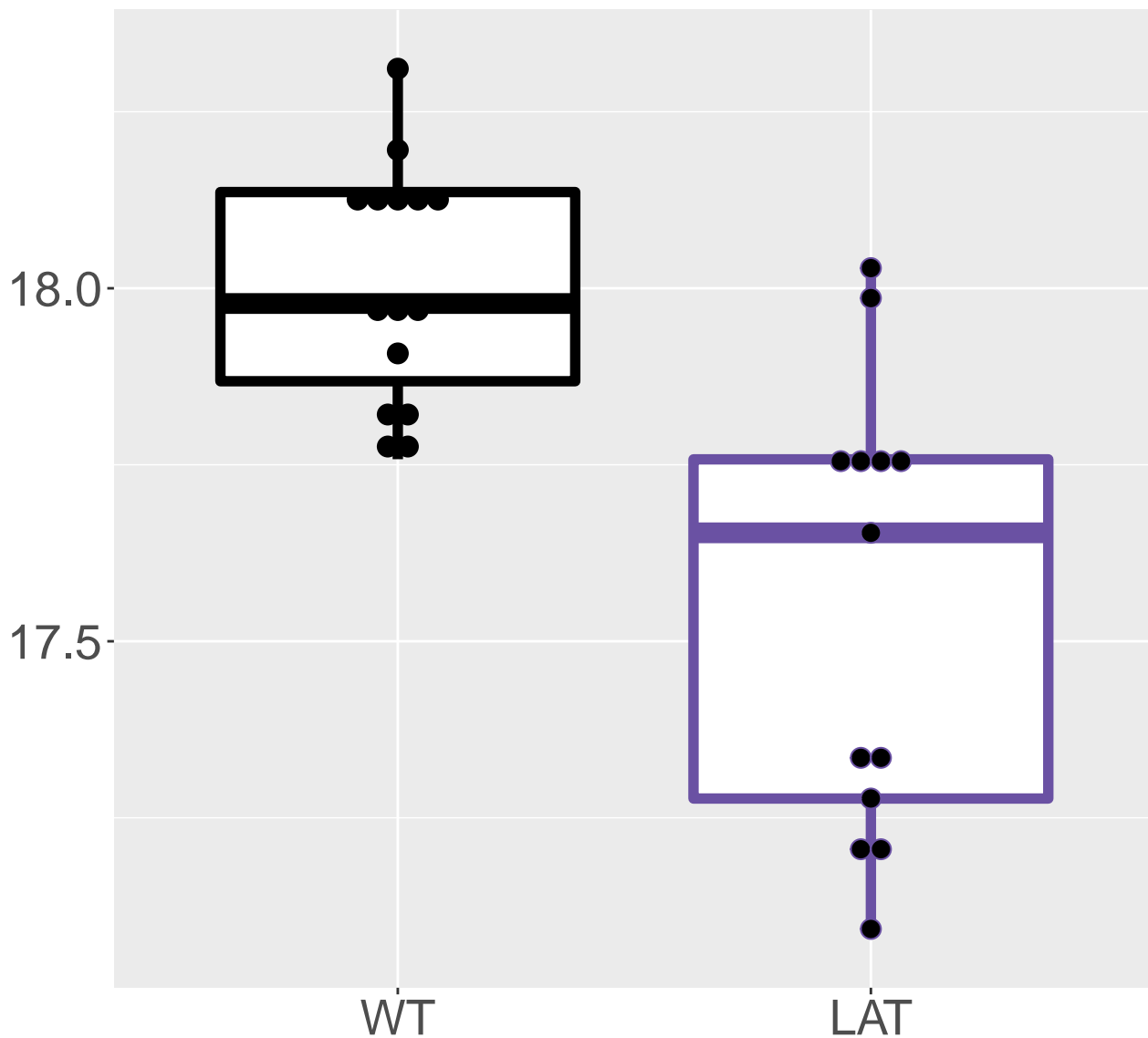
**M196.0286T509.61**

**FDR = 0.00066, FC = 1.2, sex\*\***



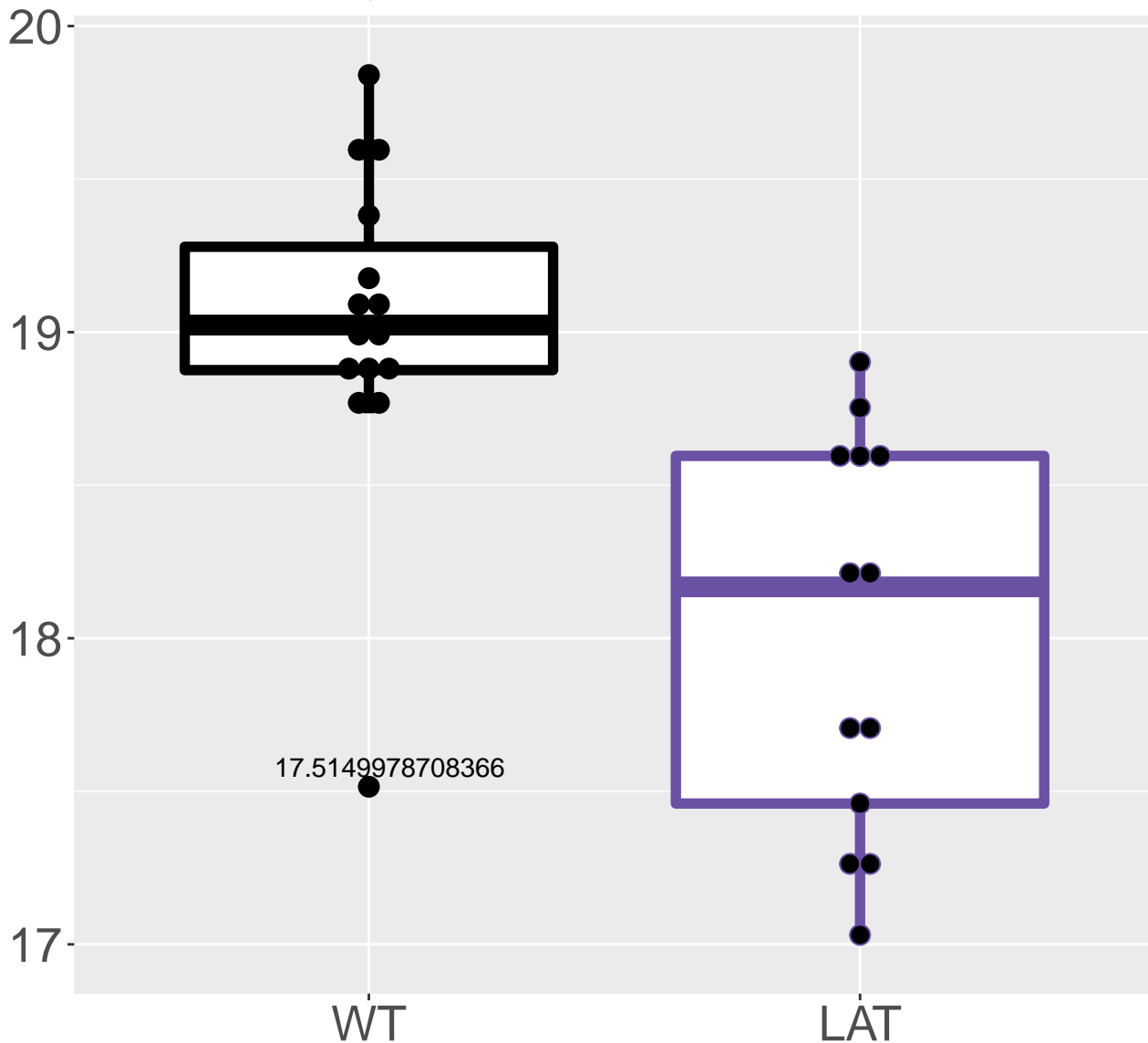
**M316.0552T359.8**

**FDR = 0.00069, FC = -0.46**

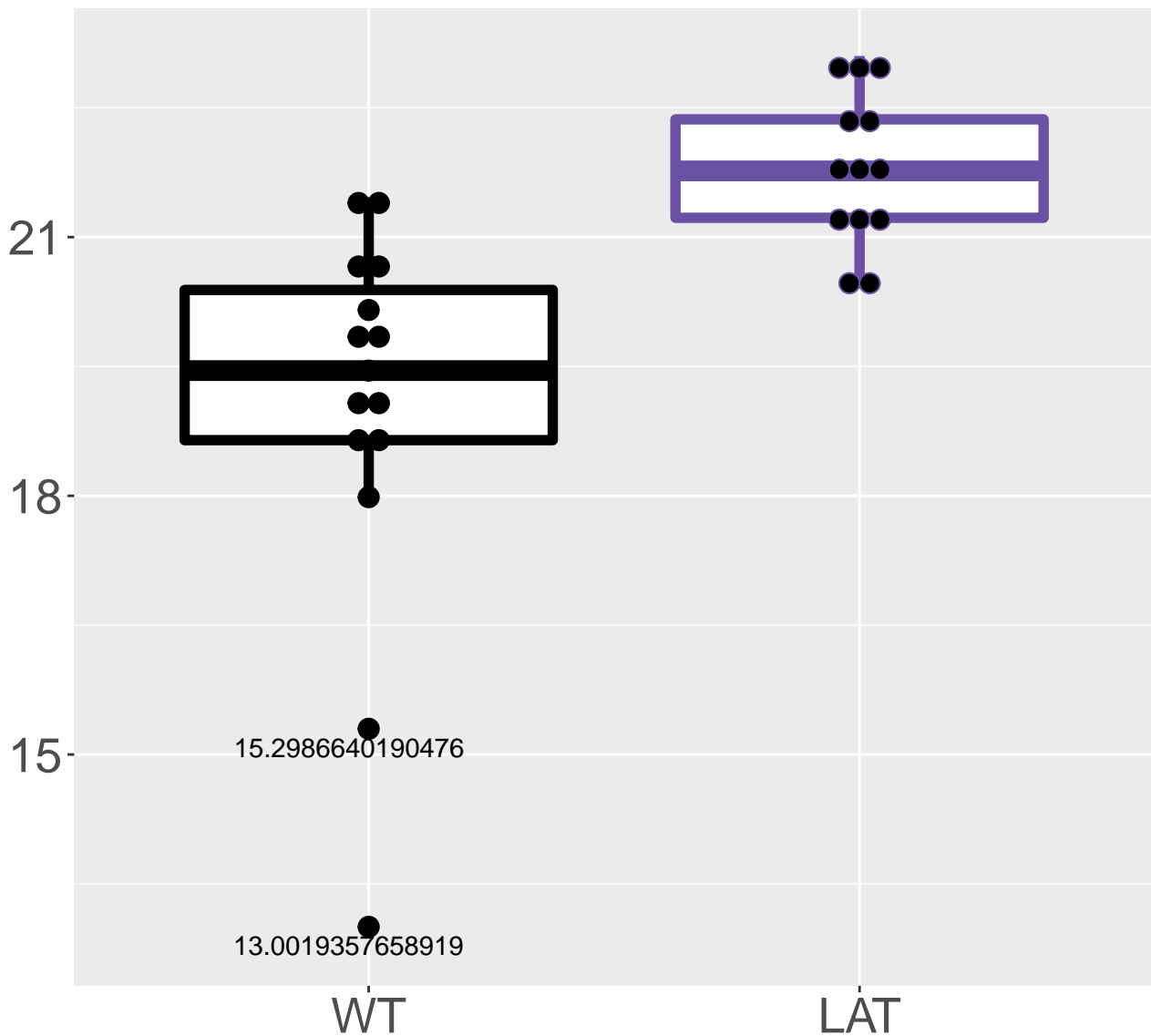




**M408.1629T321.51**  
**FDR = 7e-04, FC = -1**

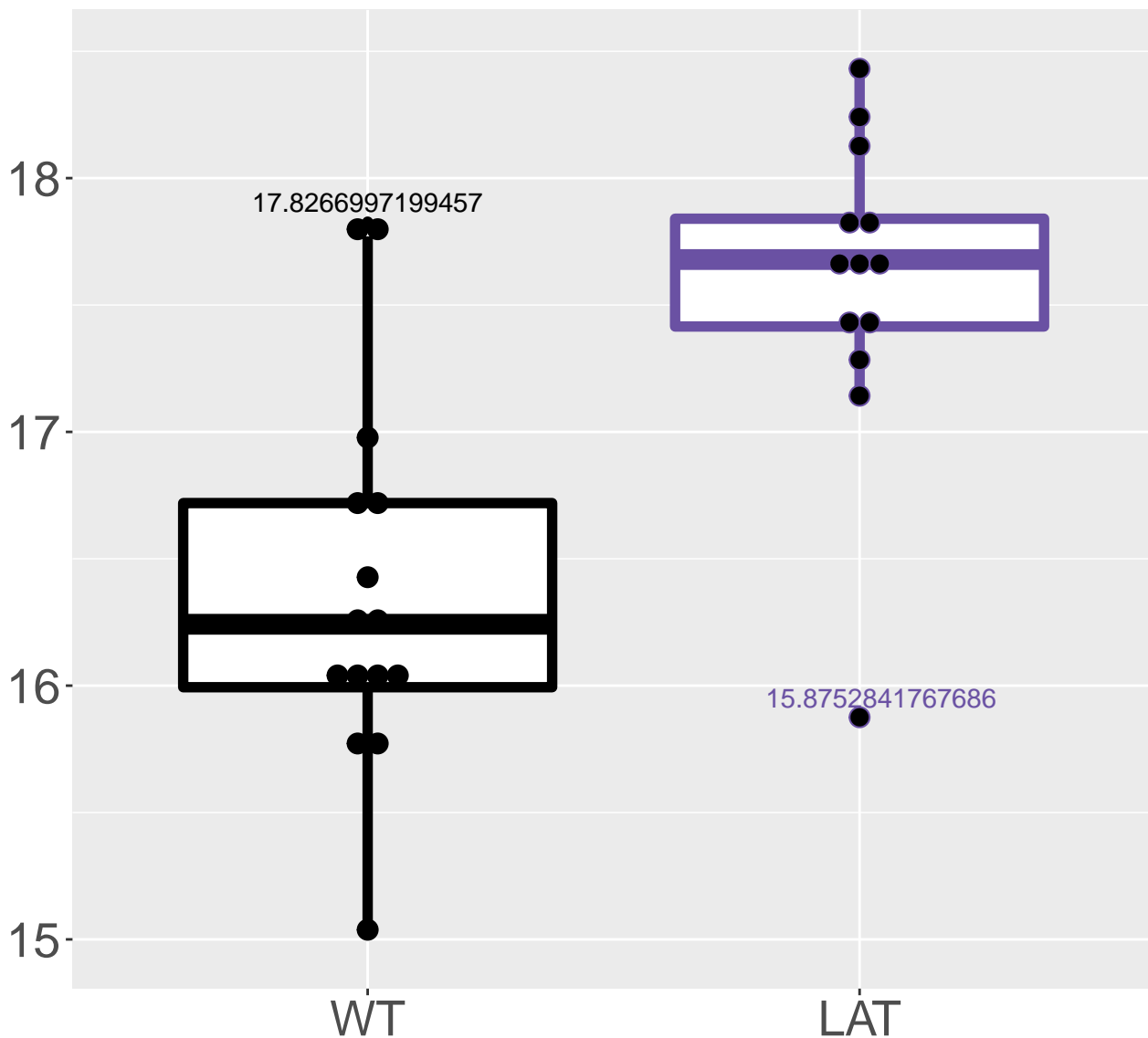


**D-Ribose 1-phosphate|D-Ribulose 5-phospha**  
**FDR = 0.00072, FC = 2.8**



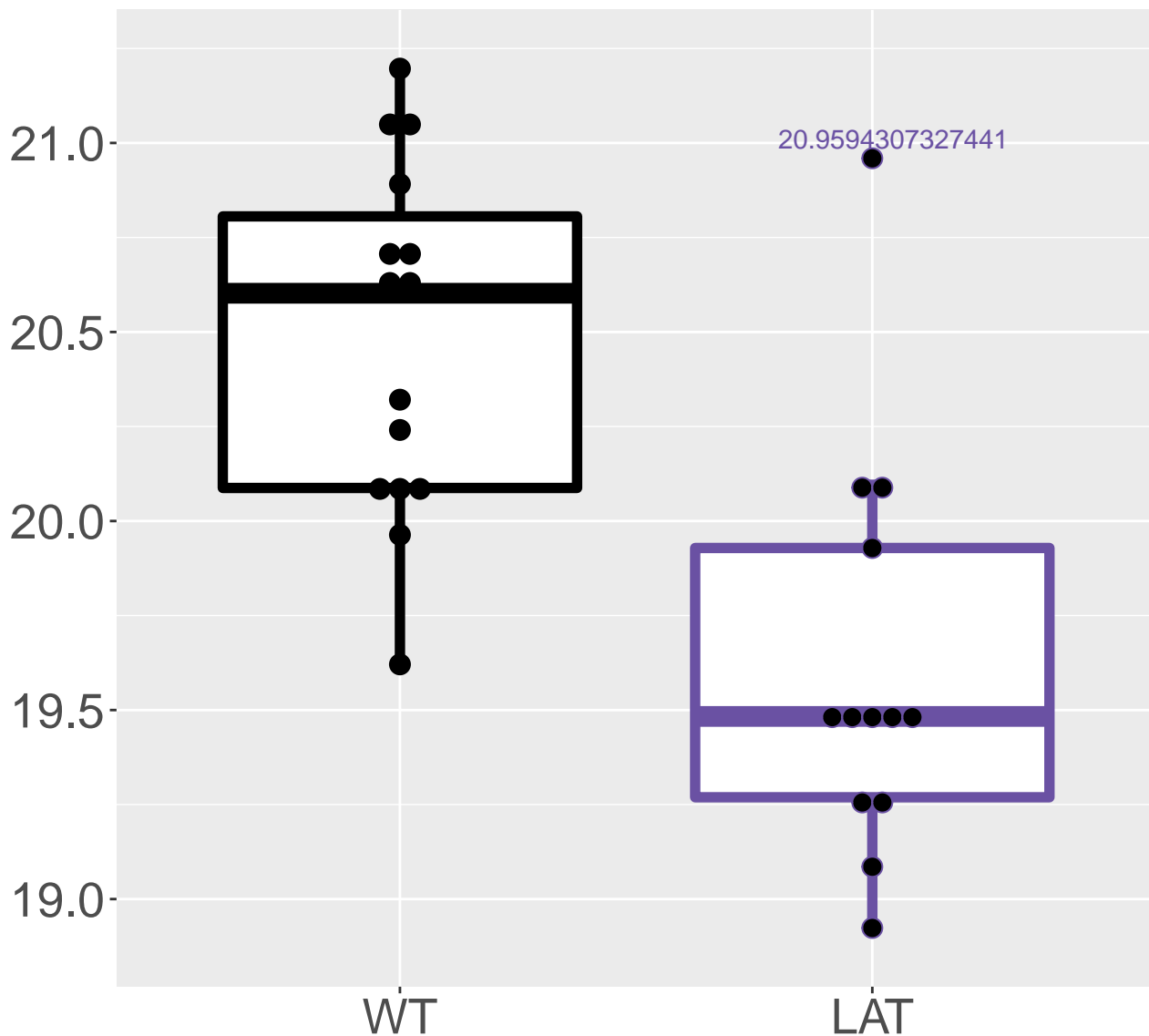
**M353.0398T186.95**

**FDR = 0.00072, FC = 1.2**



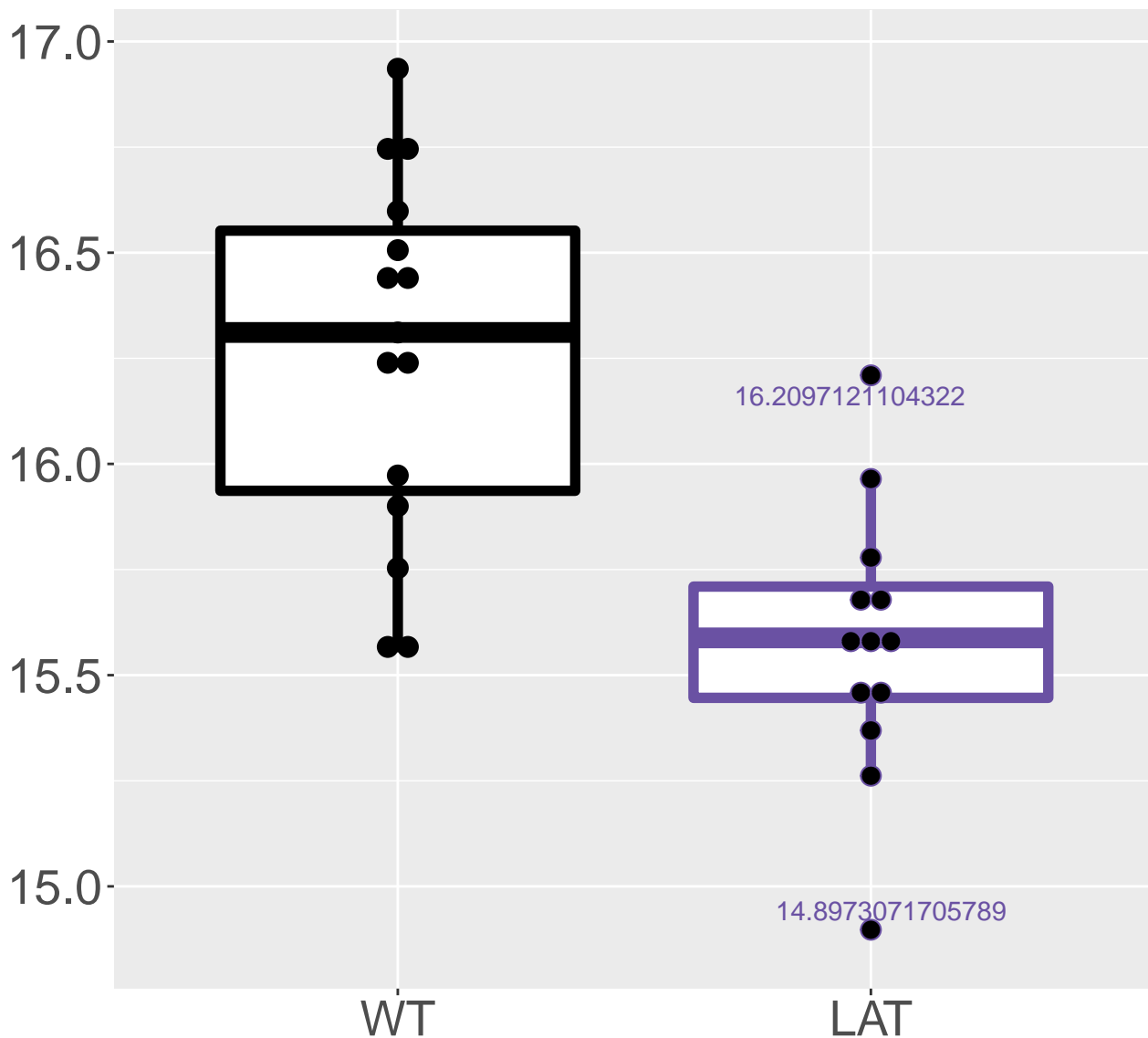
**M494.1575T639.61**

**FDR = 0.00077, FC = -0.87**

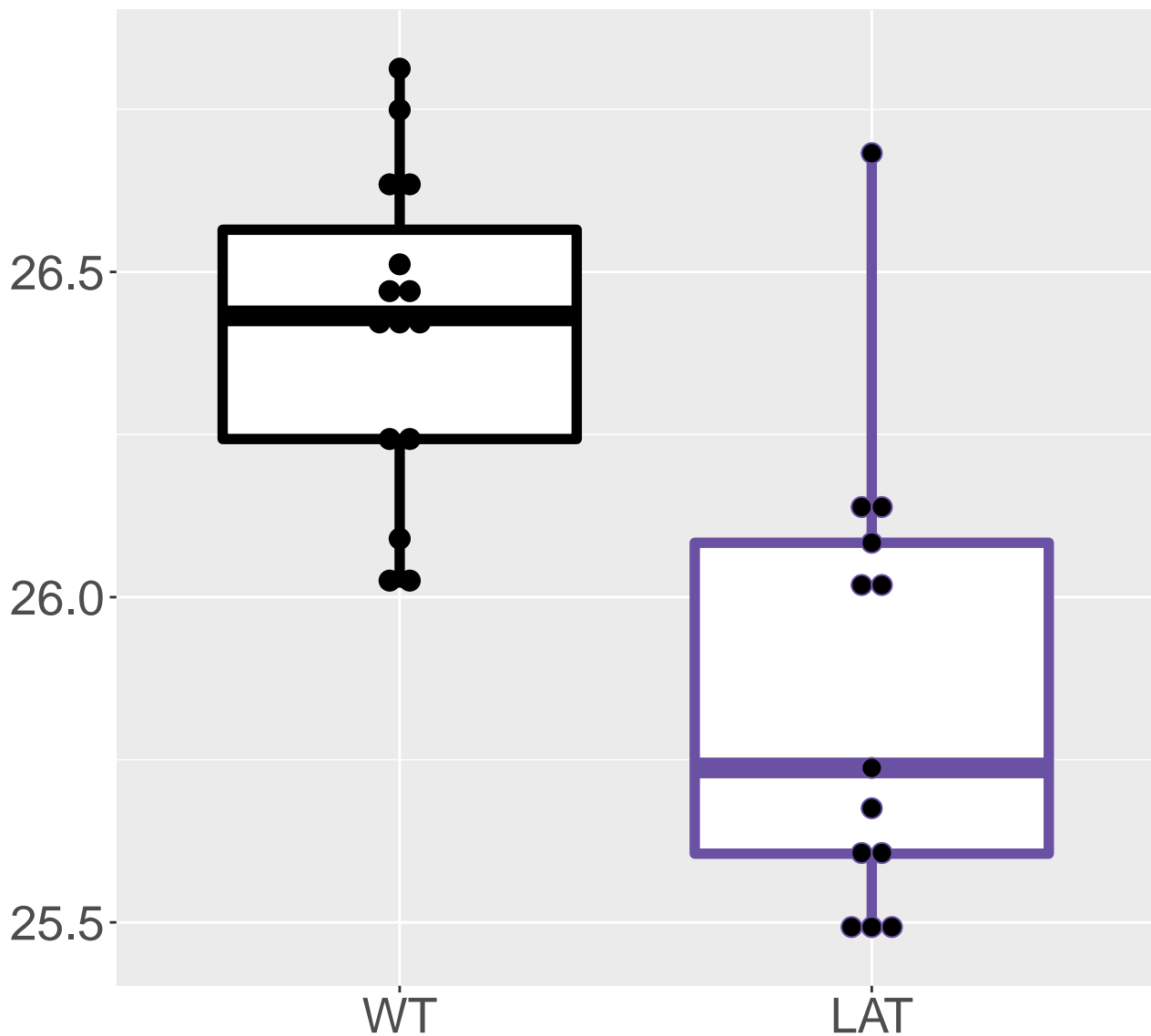


**M314.1363T174.47**

**FDR = 0.00077, FC = -0.69**

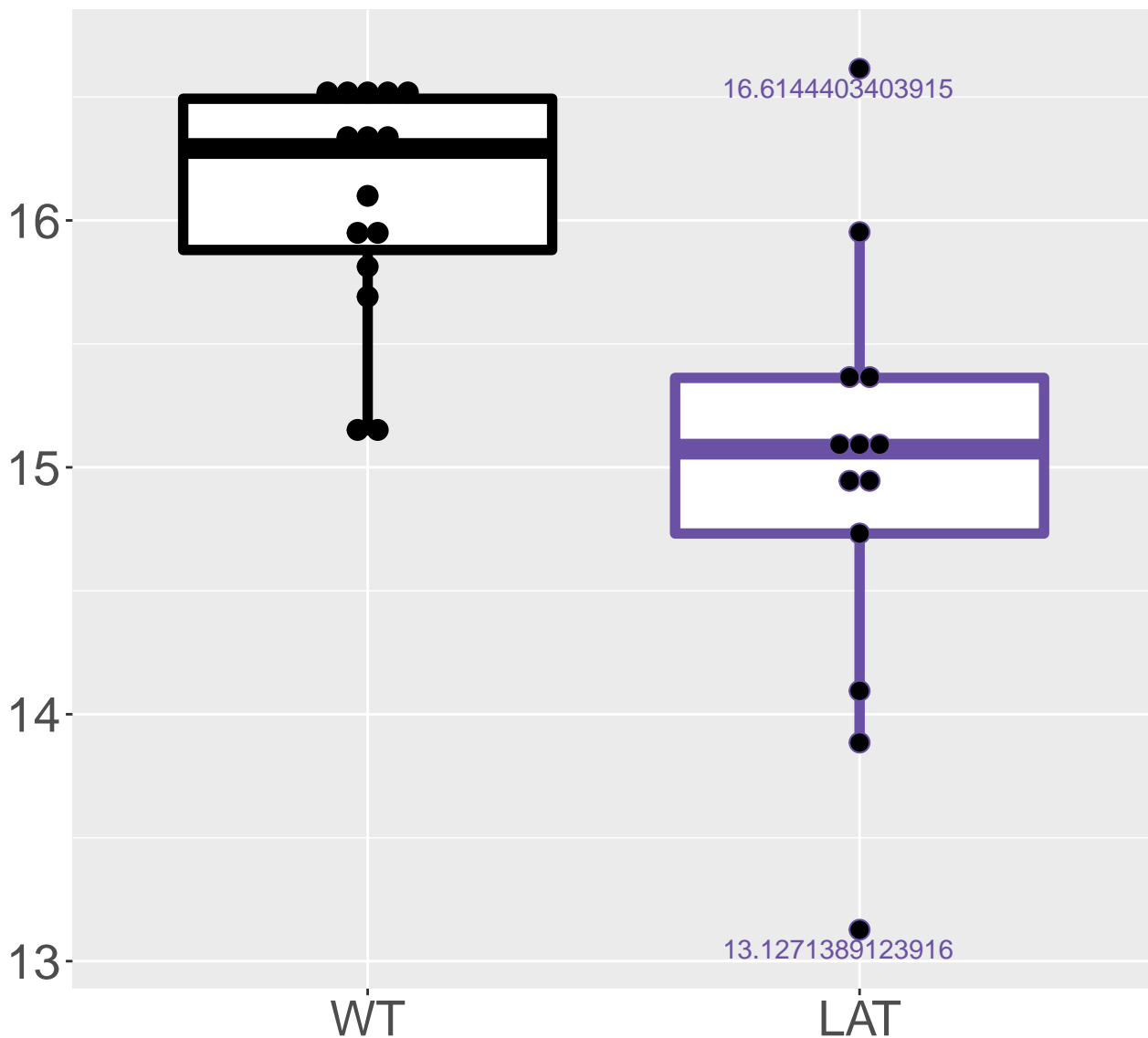


**Maltotriose;Amylotriose|Raffinose;Melitose;D**  
**FDR =  $8e-04$ , FC =  $-0.55$**

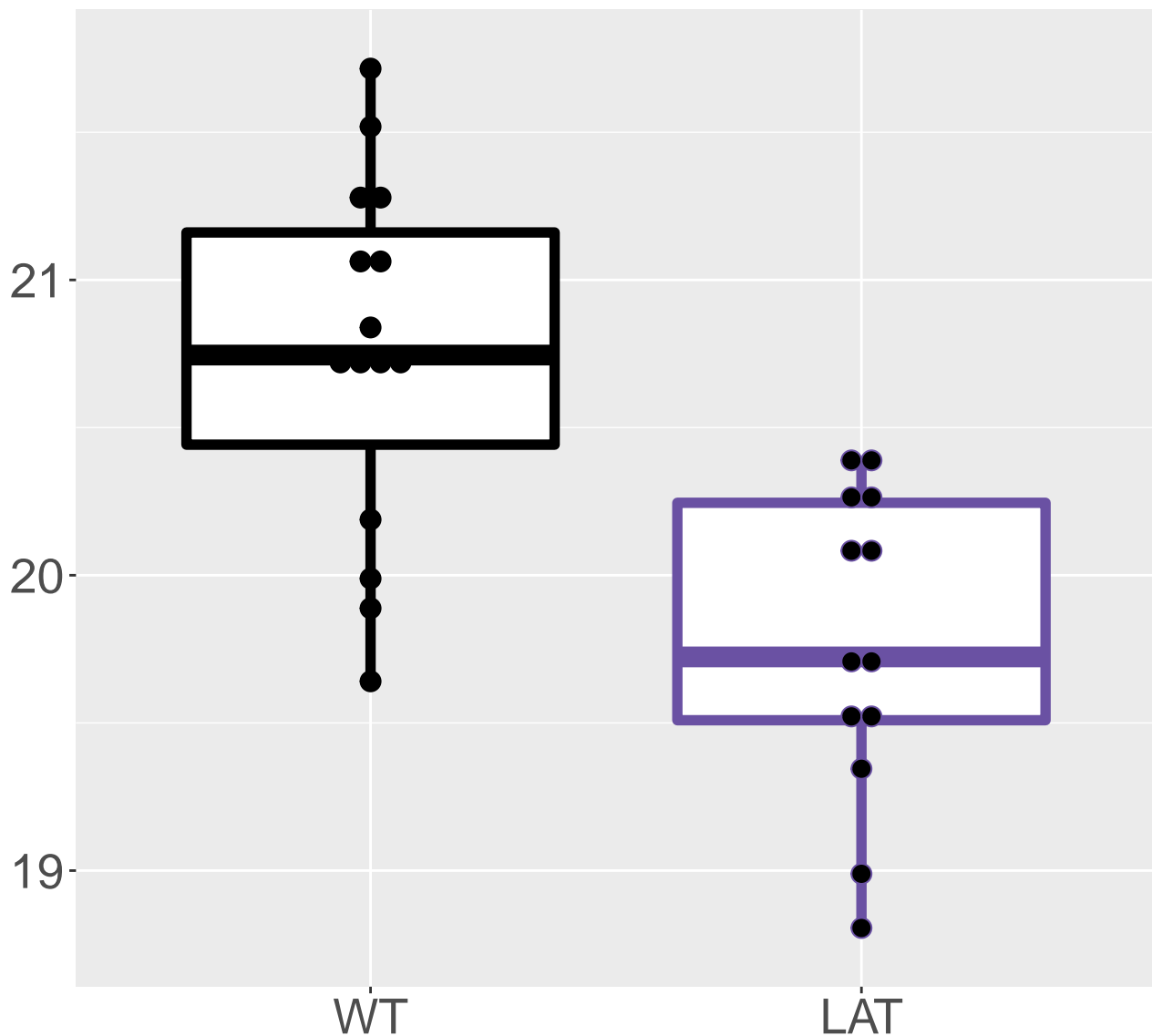


**M488.1892T184.91**

**FDR = 0.00082, FC = -1.2**



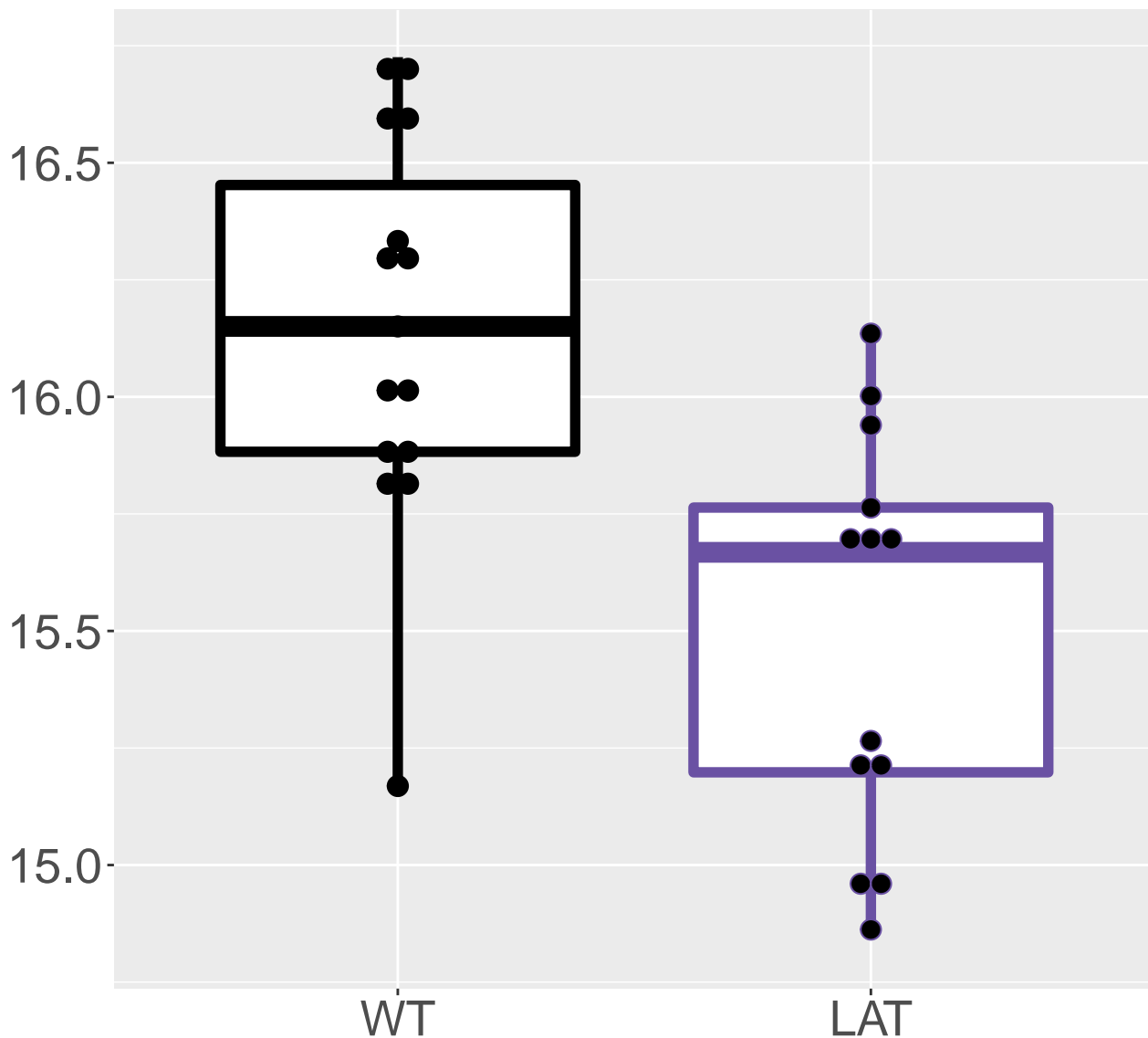
**$\hat{I}^3$ -aminobutyric acid;GABA;Gamma-Aminobuty**  
**FDR = 0.00083, FC = -0.98**





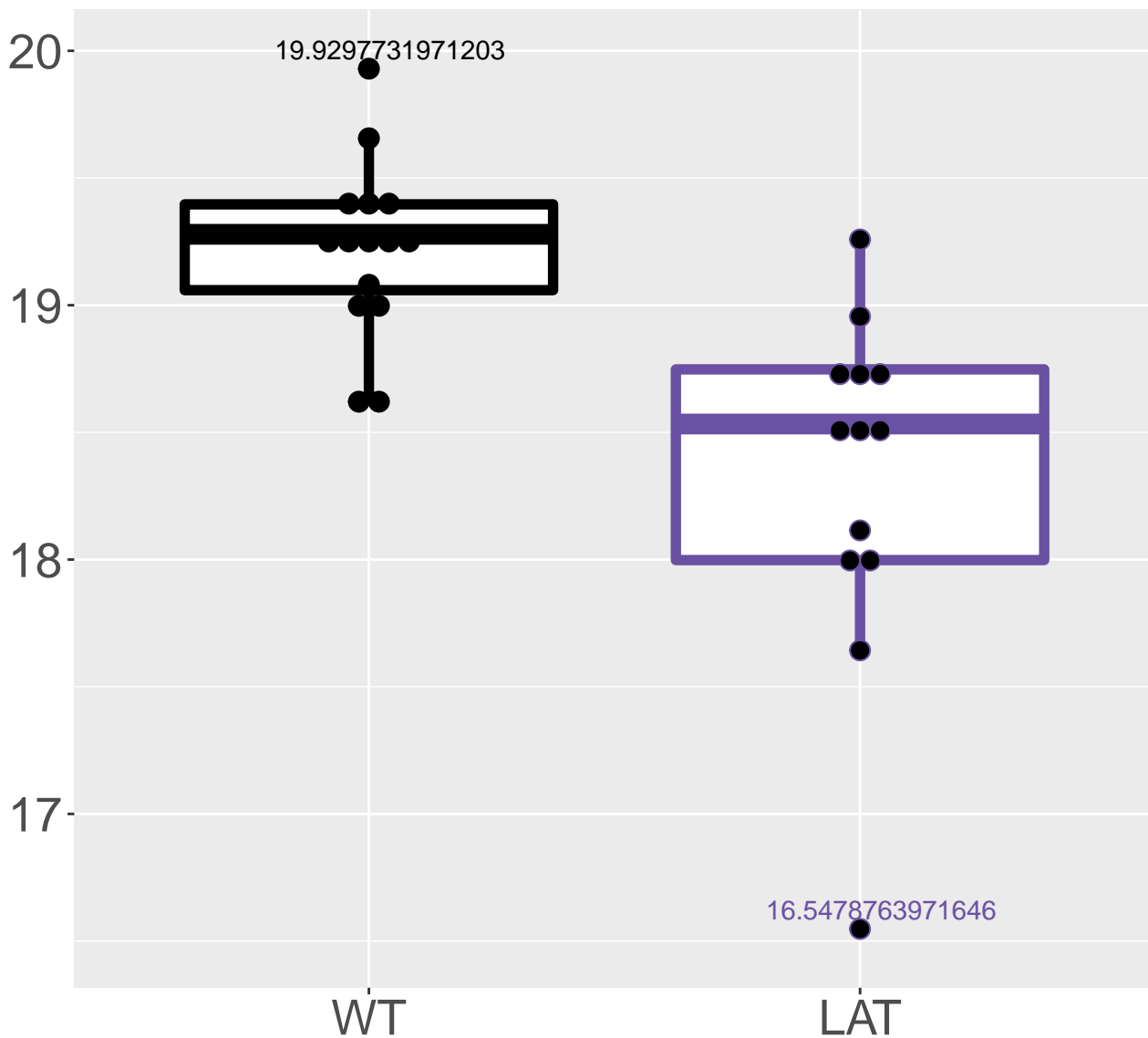
**M324.1022T536.89**

**FDR = 0.00088, FC = -0.66**



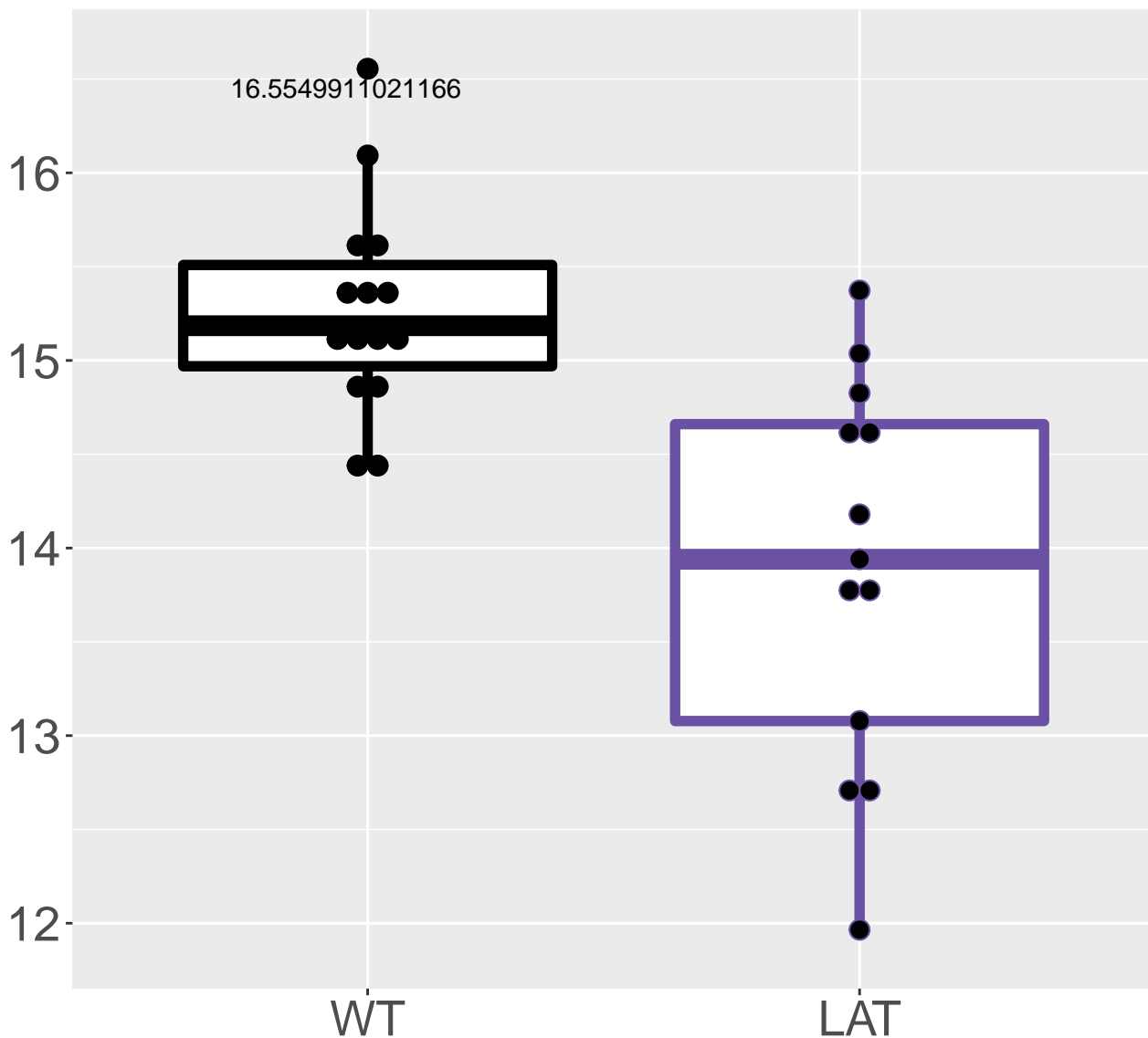
**M172.0979T259.46**

**FDR = 9e-04, FC = -0.9**



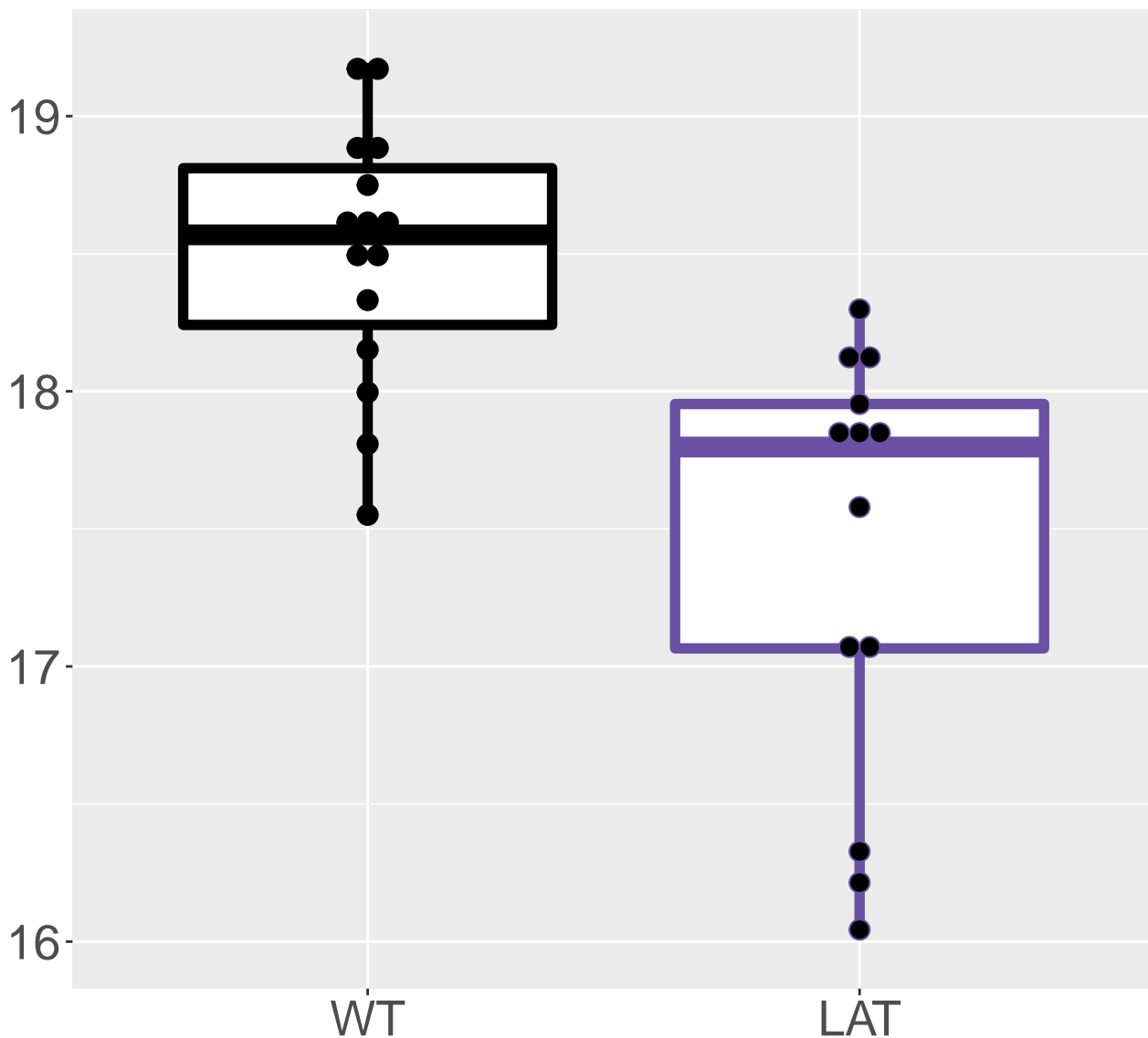
**M542.1861T543.68**

**FDR = 9e-04, FC = -1.4**



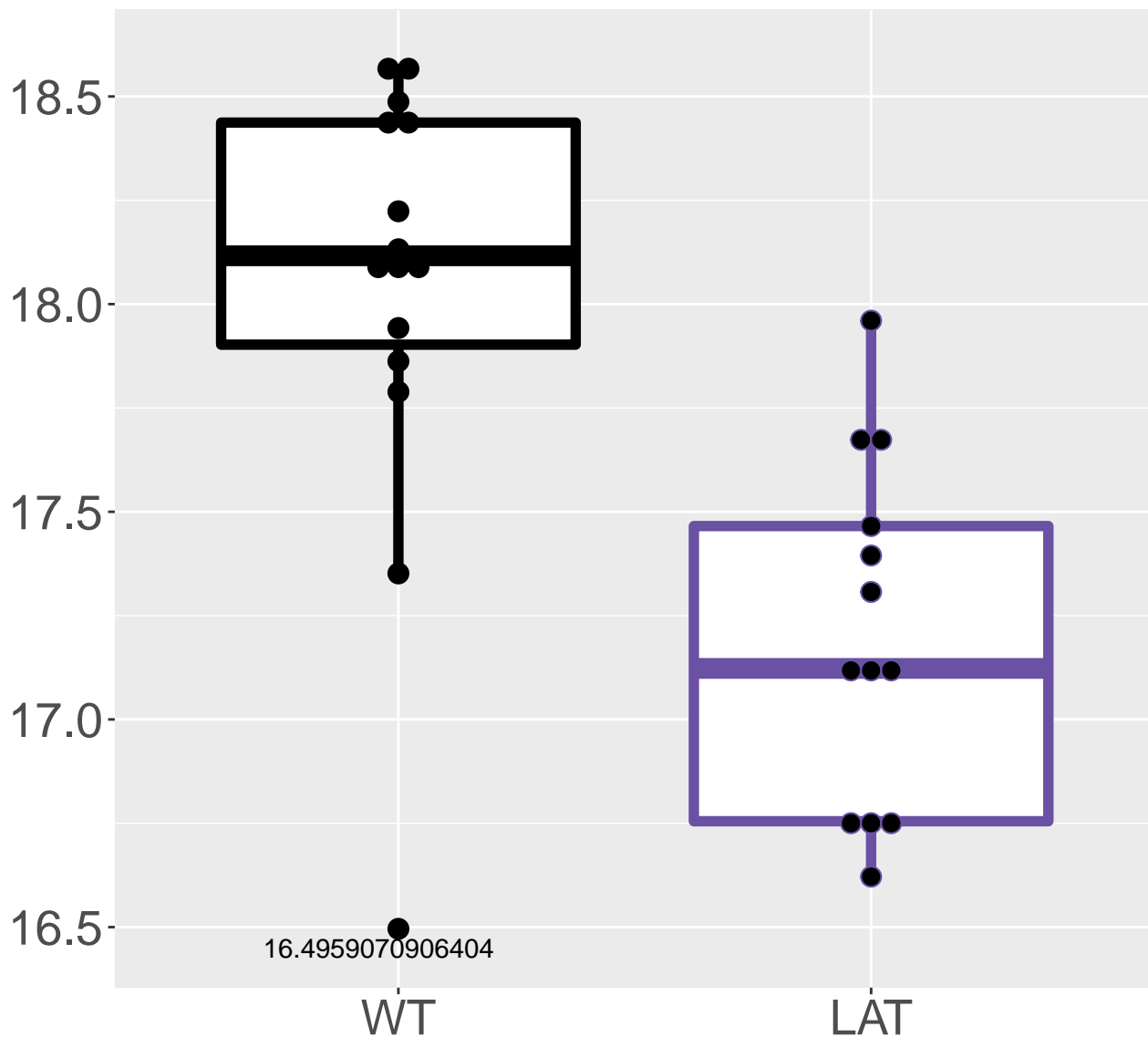
**M428.1787T260.44**

**FDR = 9e-04, FC = -1.1**



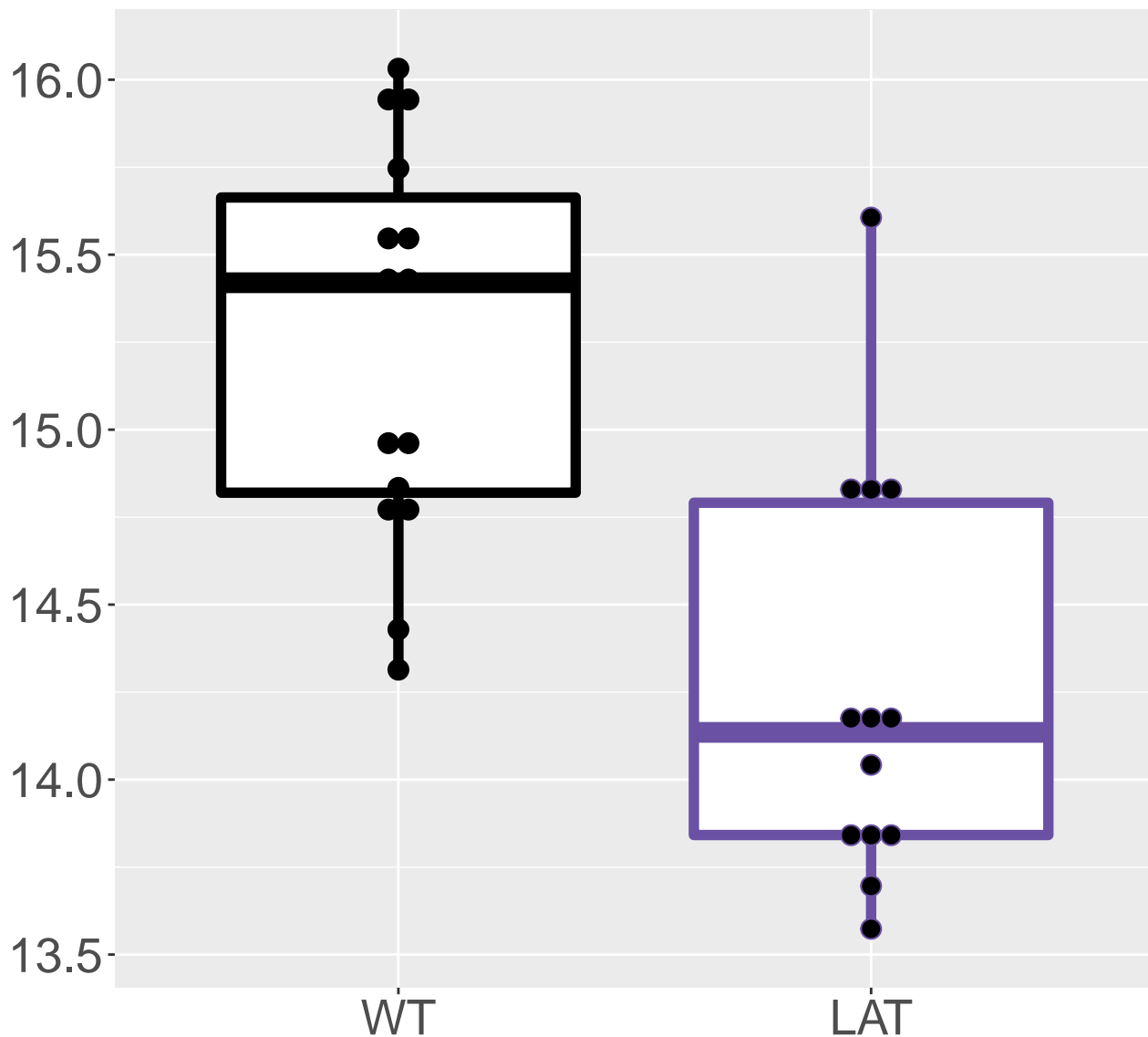
**M716.2064T573.59**

**FDR =  $9e-04$ , FC =  $-0.83$**



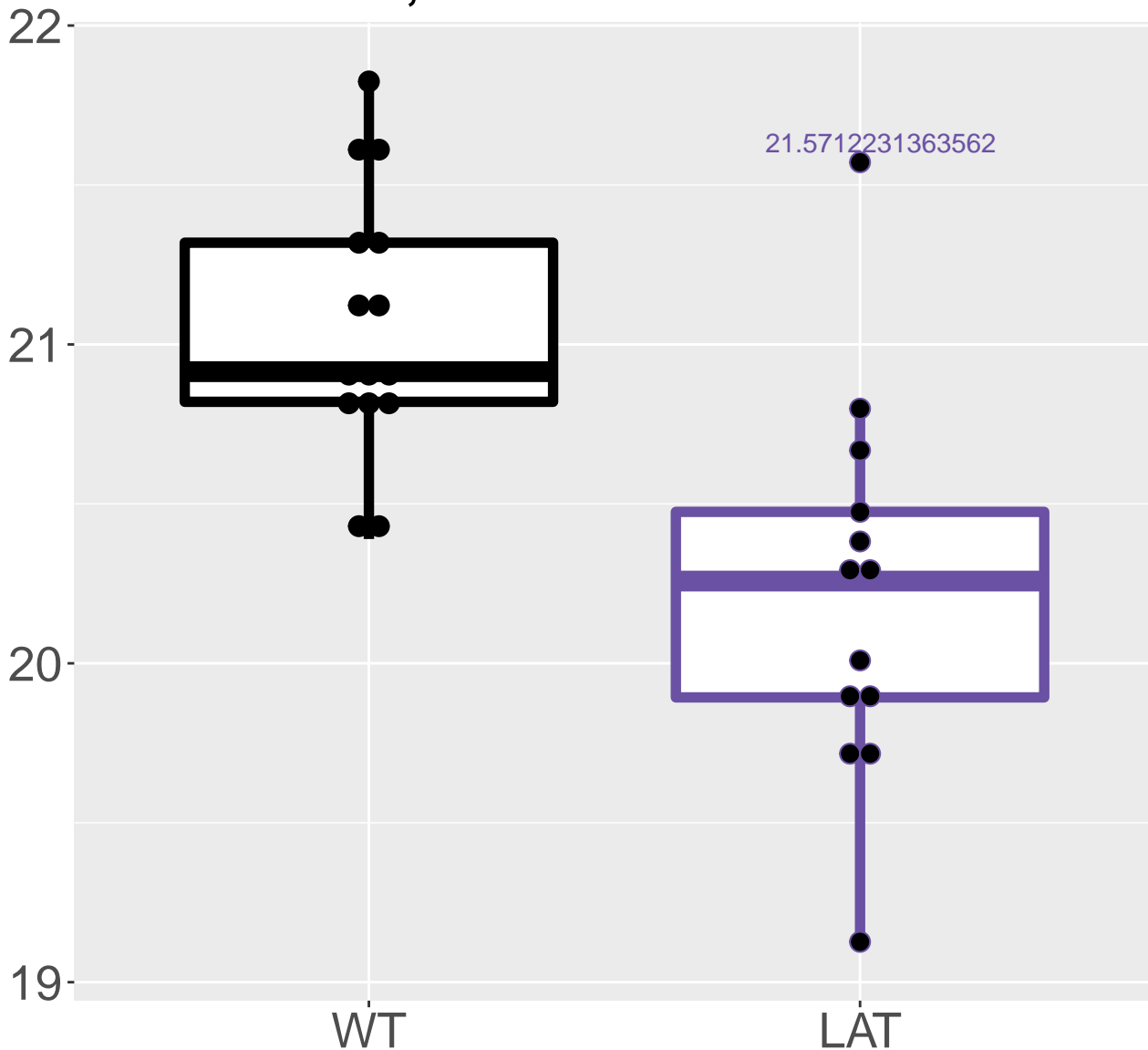
**M525.6683T639.61**

**FDR = 0.00091, FC = -0.98**

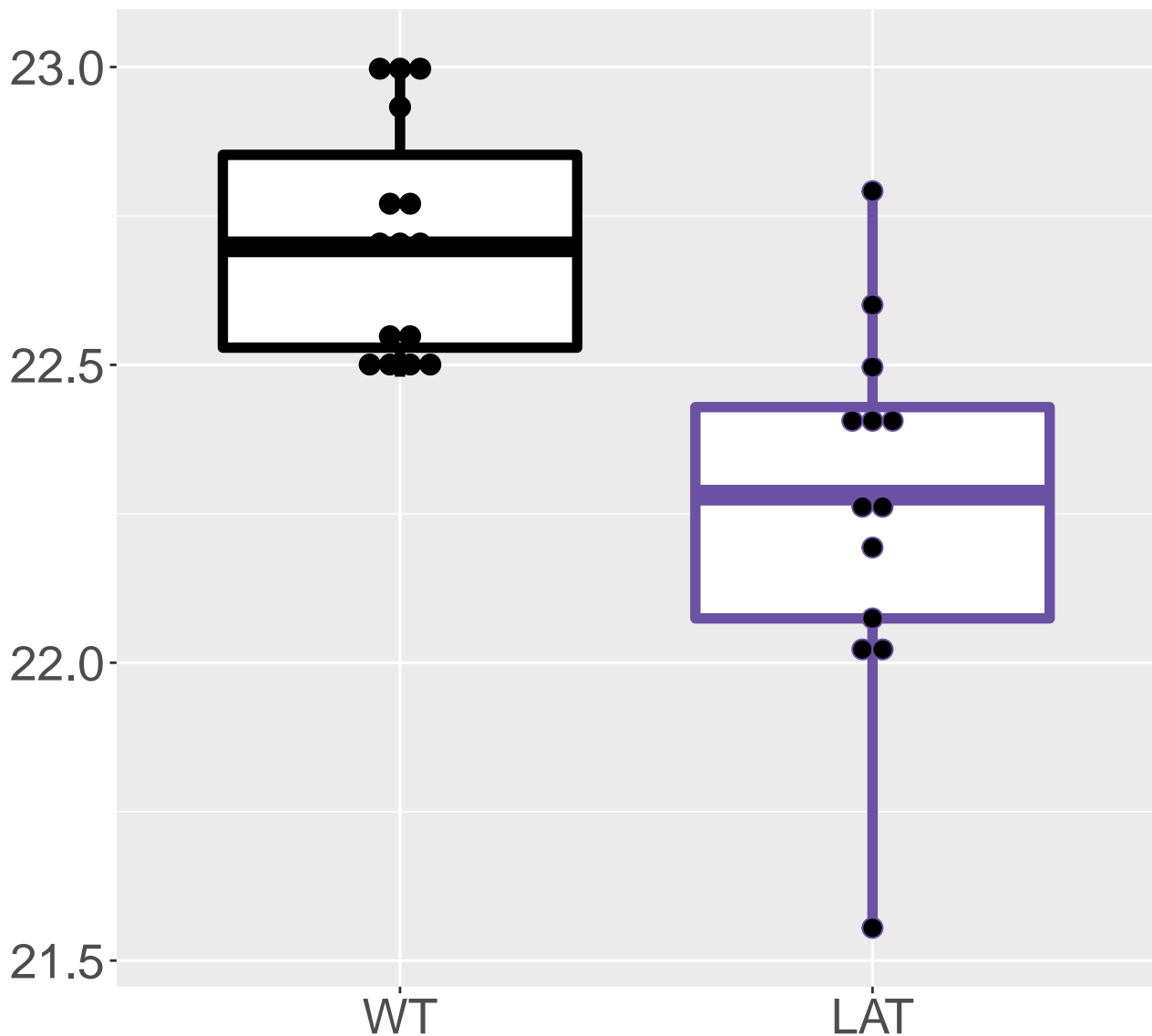


**M402.1258T536.64**

**FDR = 0.00091, FC = -0.84**



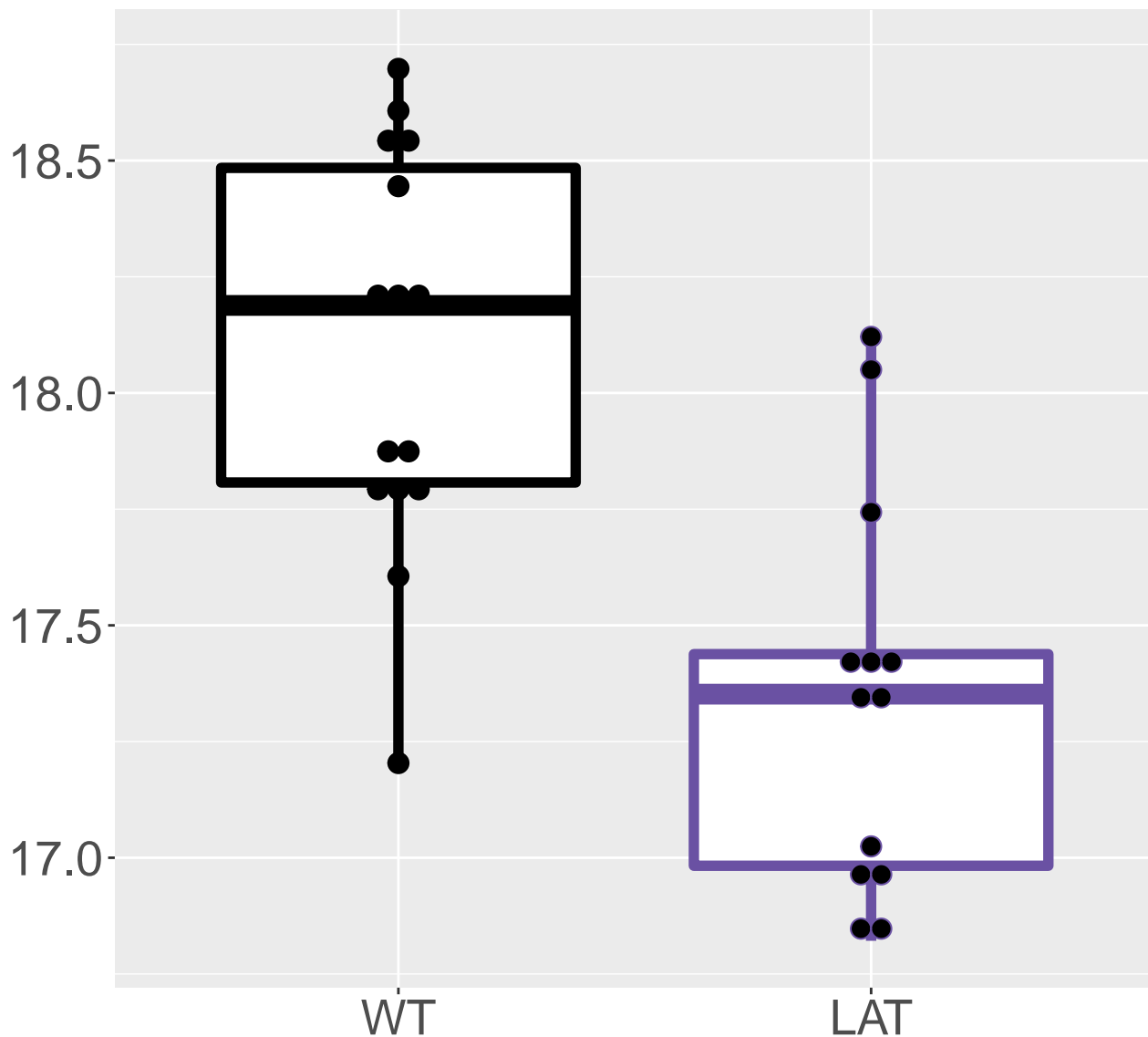
L-(-)-Arabitol;L-Arabitol;L-Arabinitol|Adonitol  
FDR = 0.00091, FC = -0.44





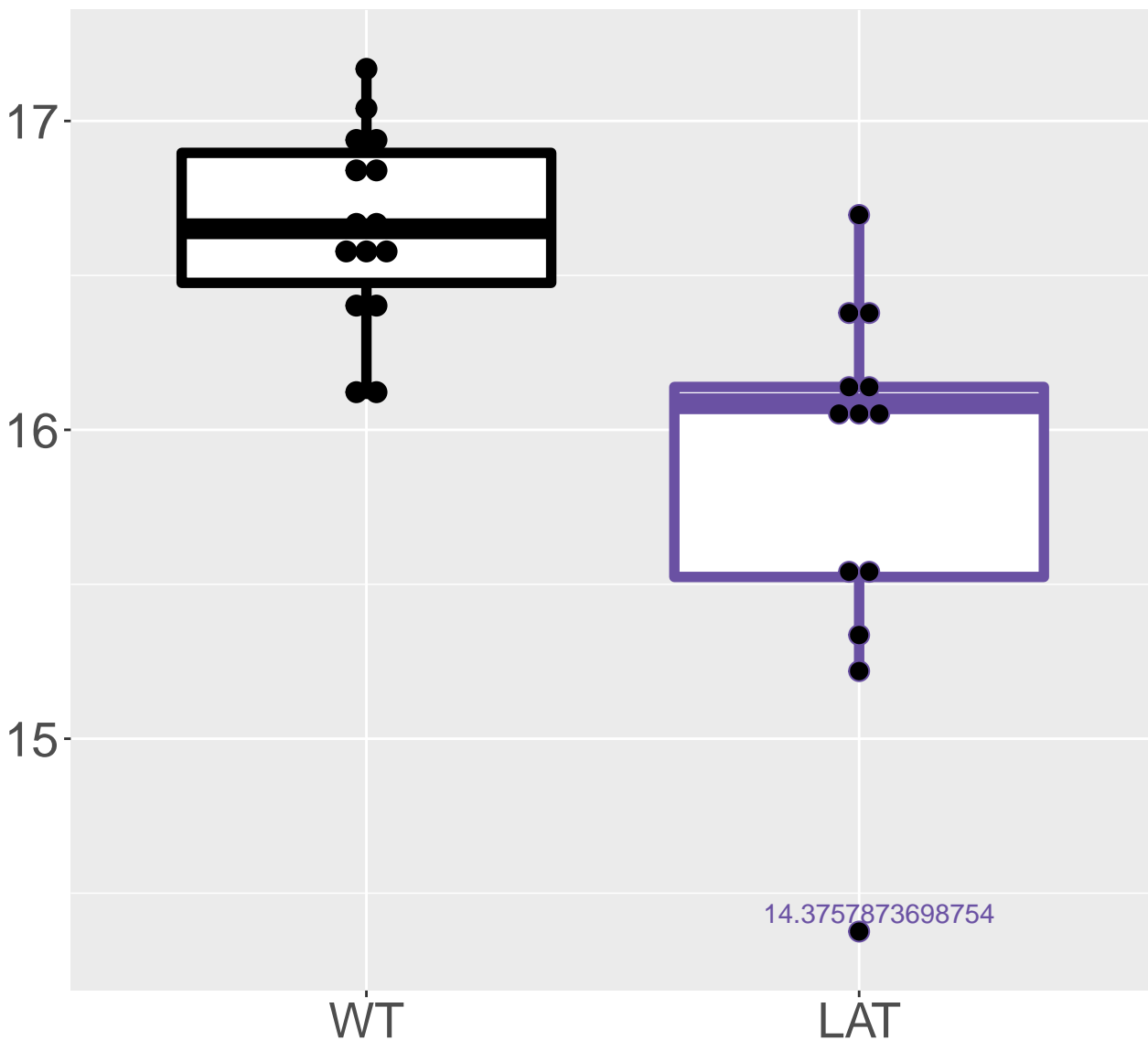
**M309.1321T429.93**

**FDR = 0.00093, FC = -0.75**



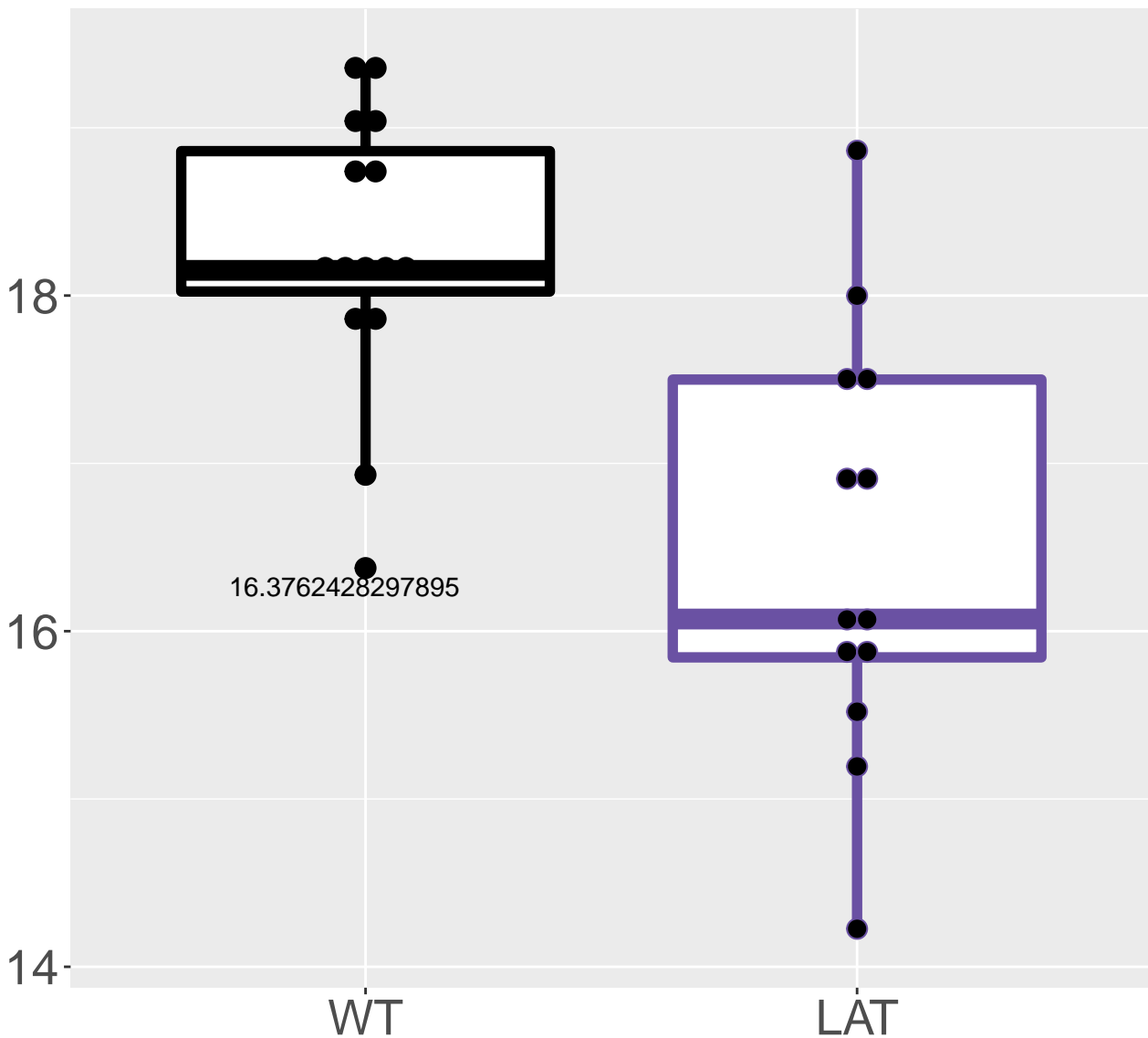
**M299.118T443**

**FDR = 0.00094, FC = -0.82**



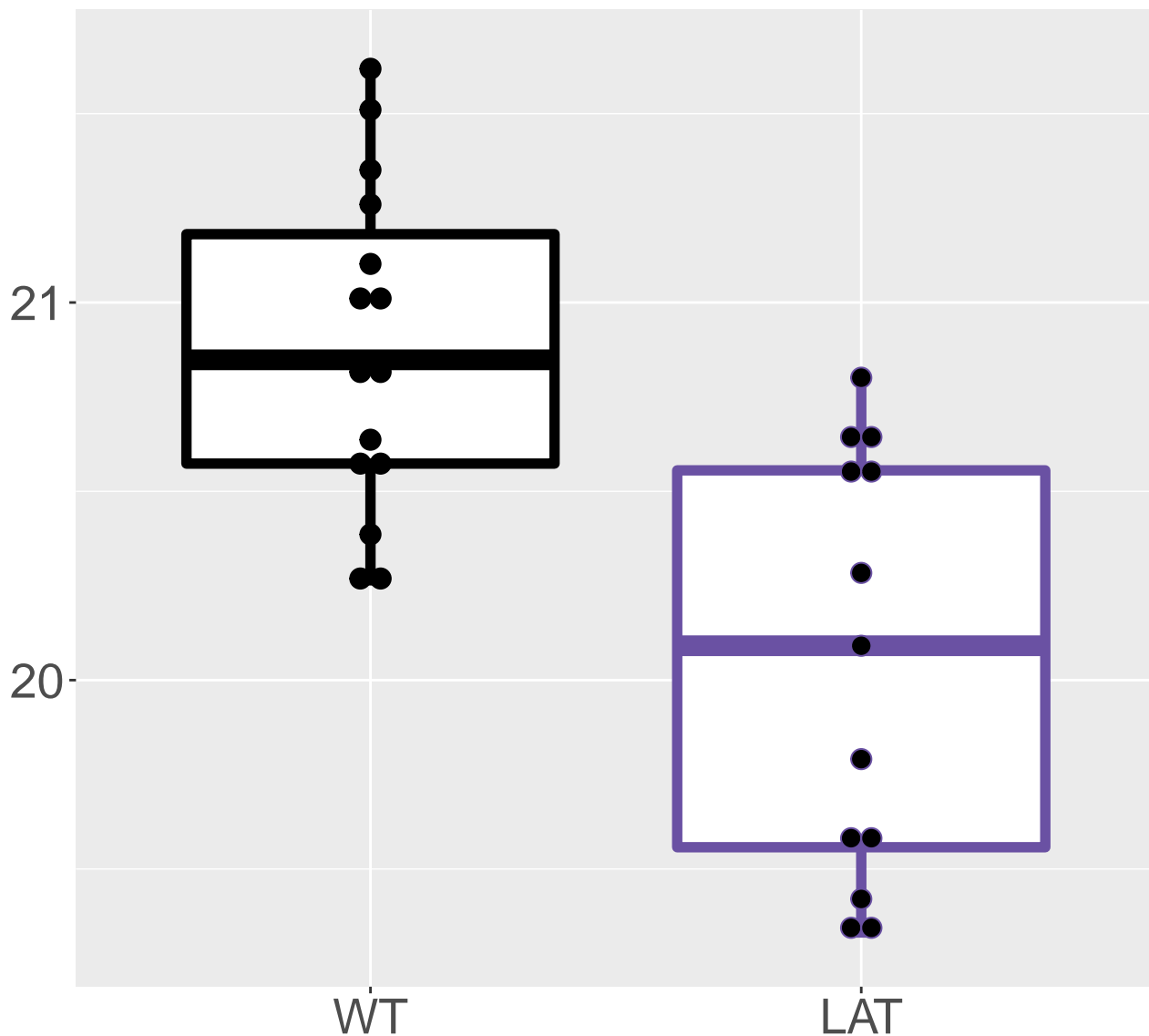
**M830.2786T525.56**

**FDR = 0.00095, FC = -1.8**



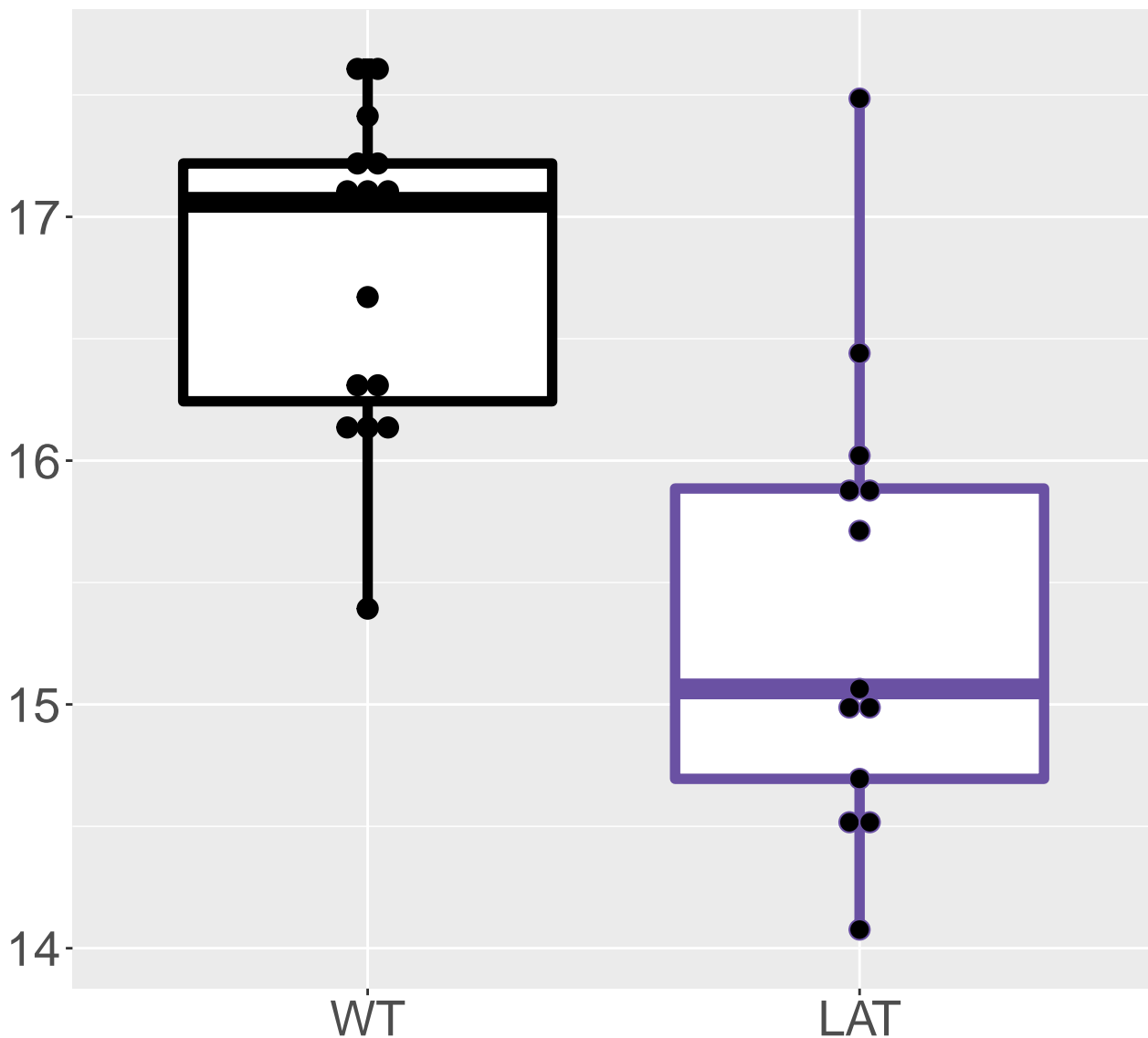
**M369.0991T365.41**

**FDR = 0.00099, FC = -0.83**



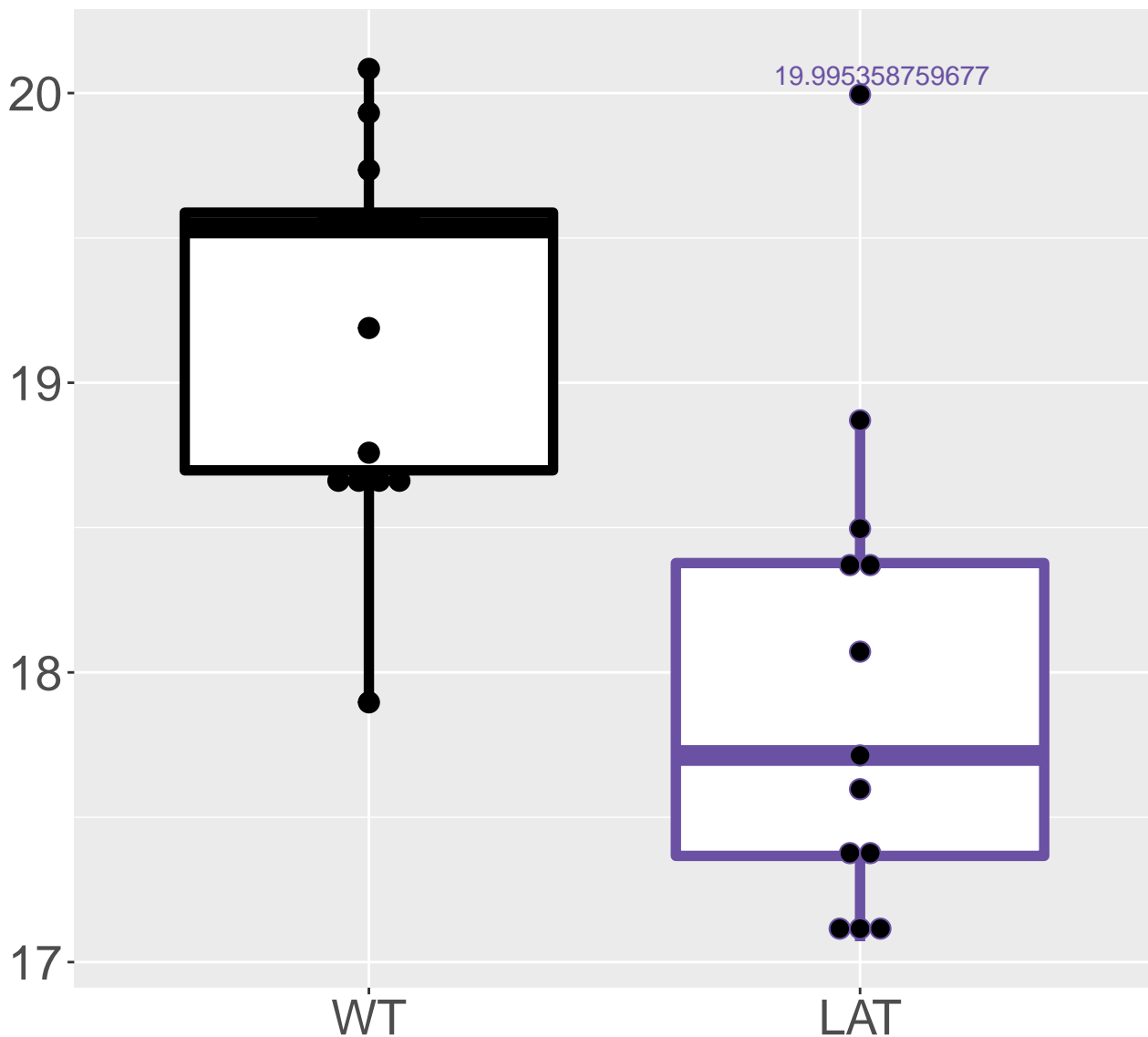
**M999.8293T608.26**

**FDR = 0.00099, FC = -1.4**



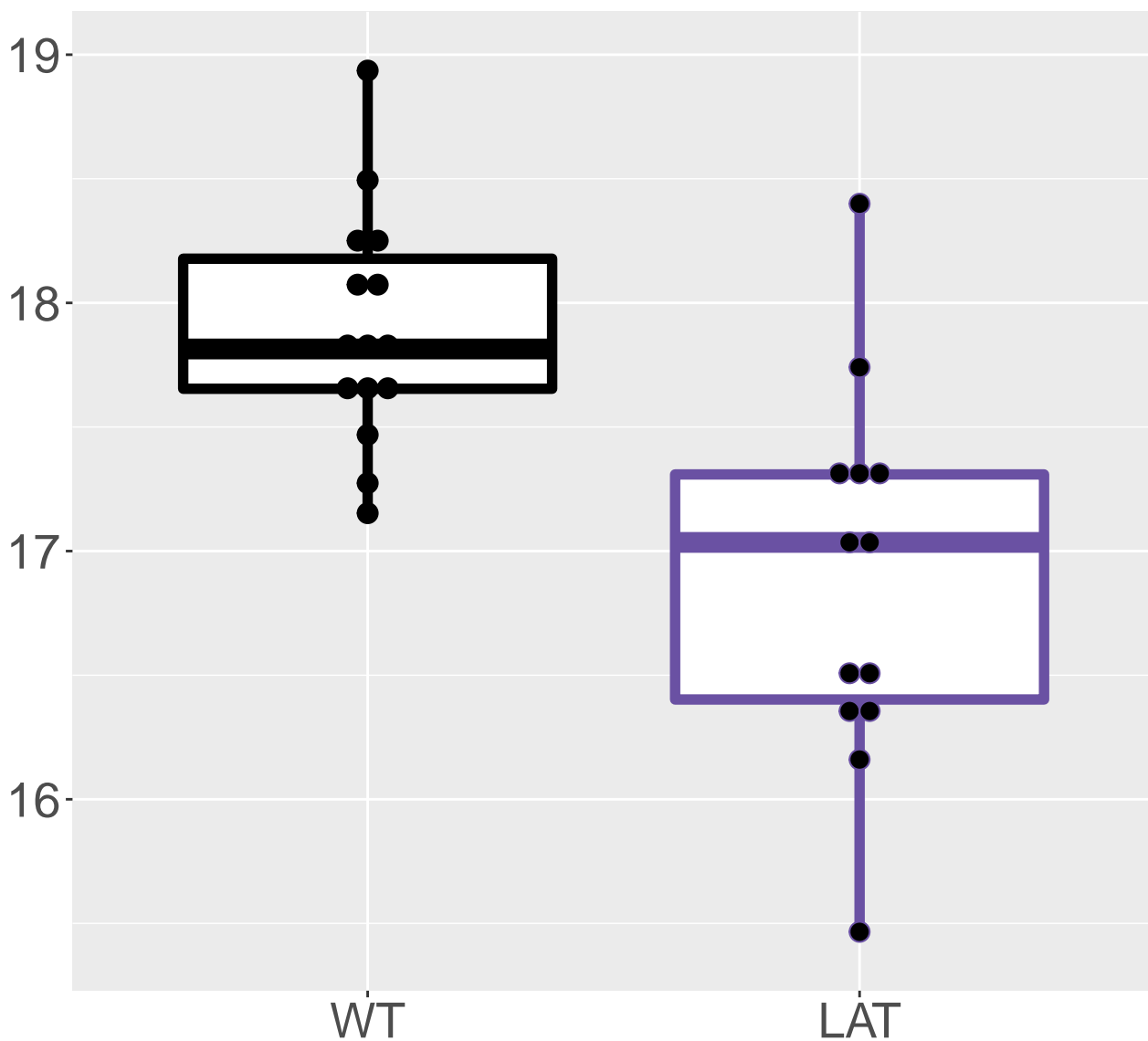
**M998.3249T608.2**

**FDR = 0.001, FC = -1.2**



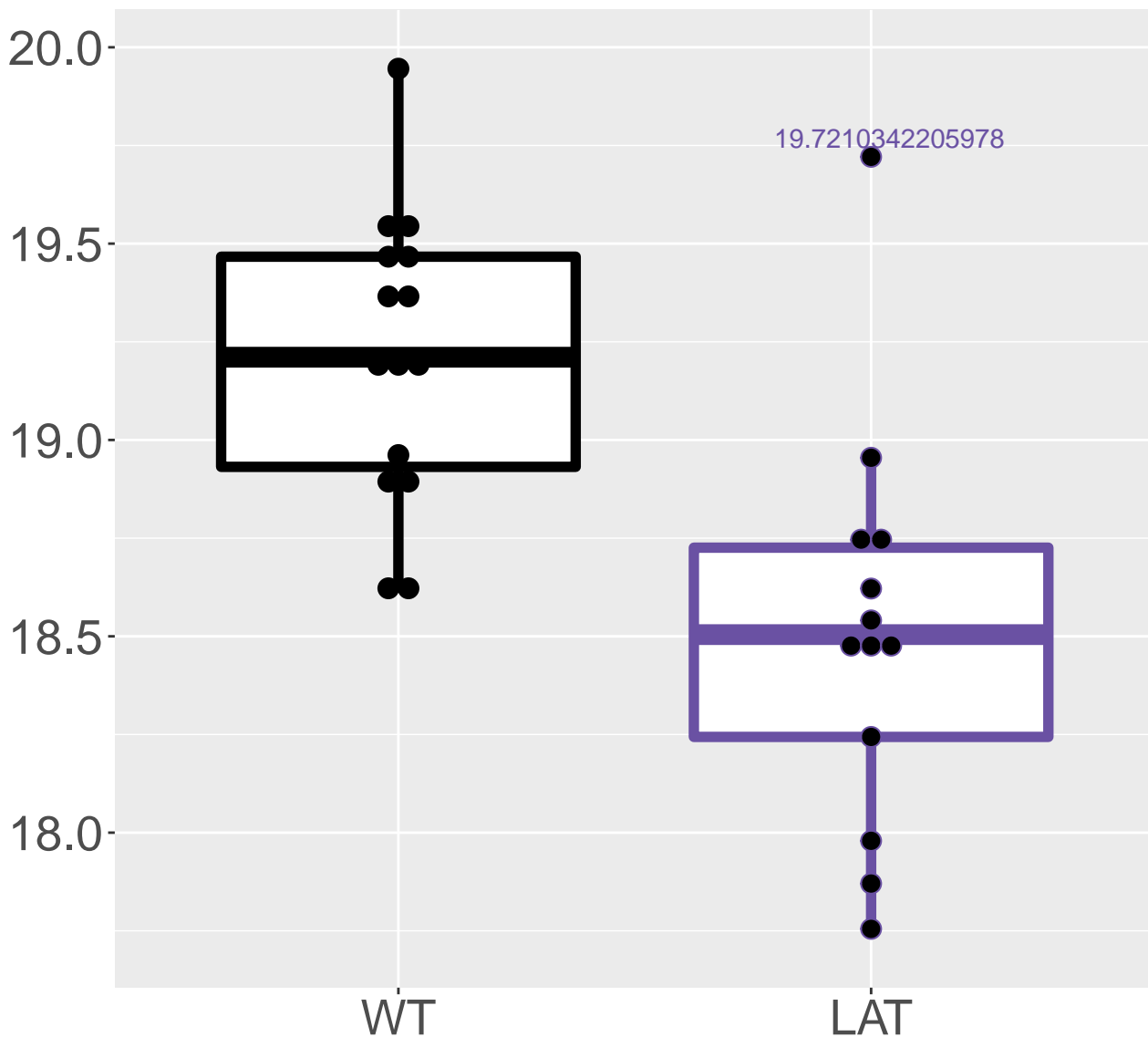
**M879.1789T544.56**

**FDR = 0.001, FC = -1**



**M377.0862T536.45**

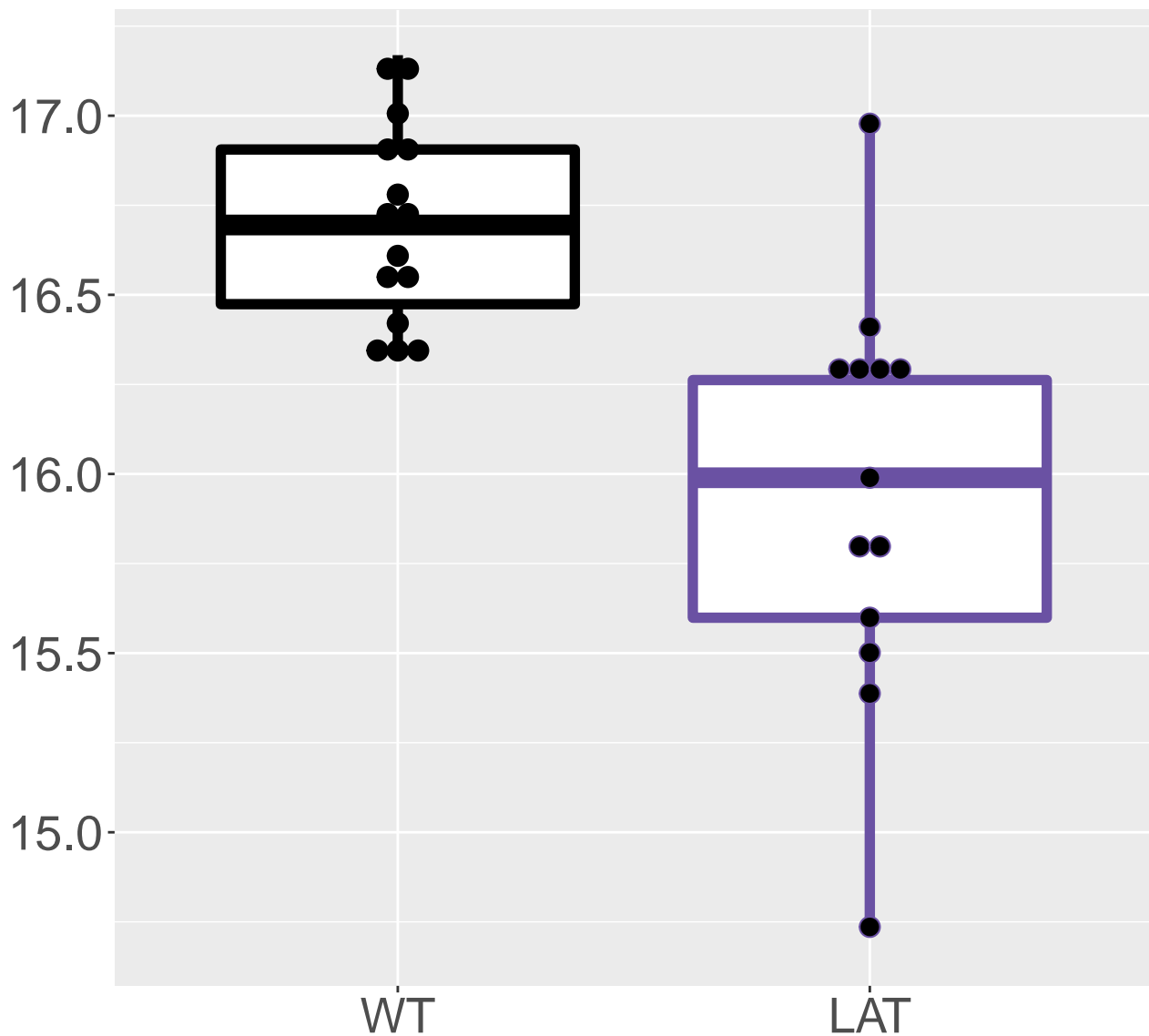
**FDR = 0.001, FC = -0.71**





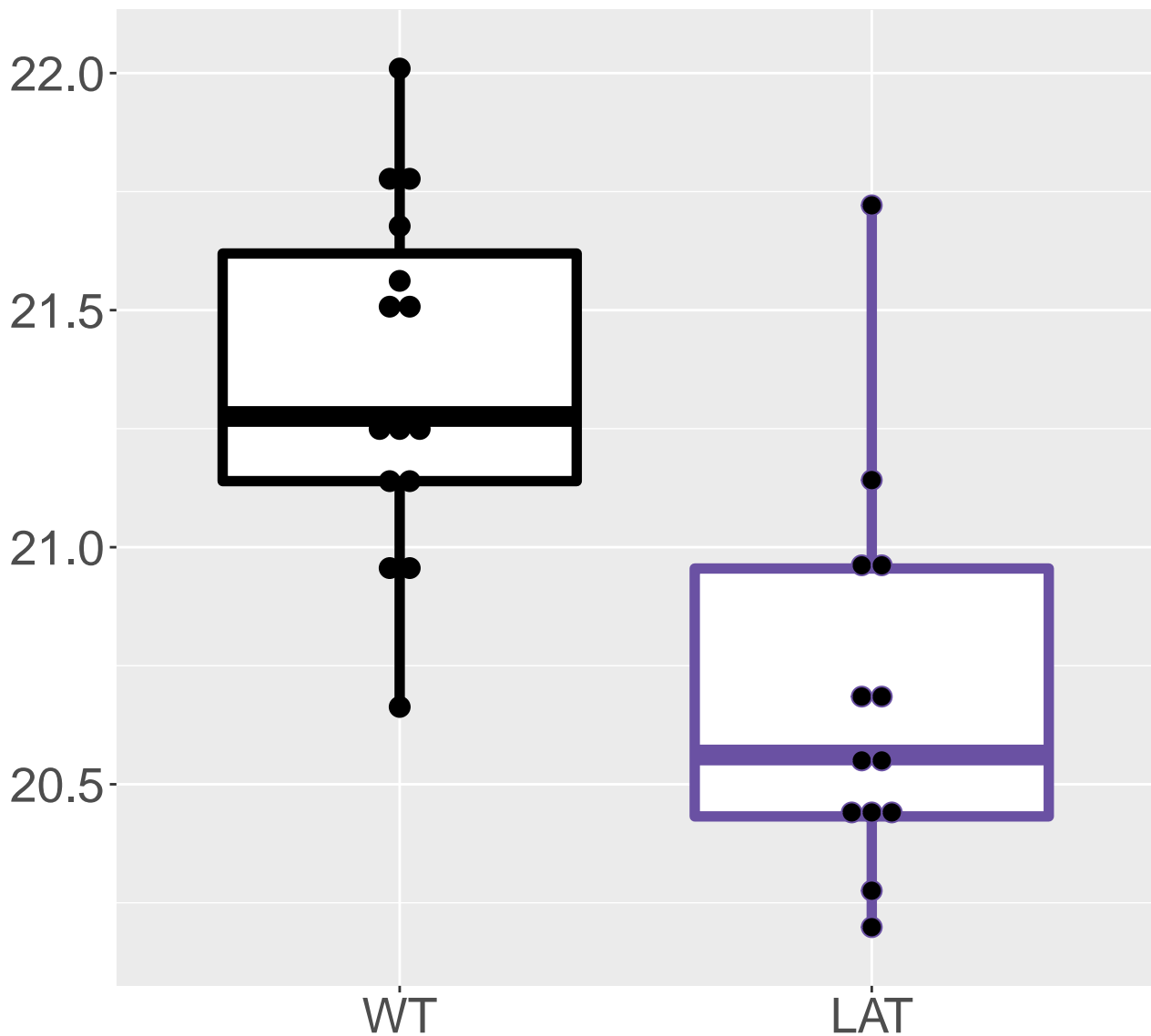
**M445.1456T578.21**

**FDR = 0.001, FC = -0.75**



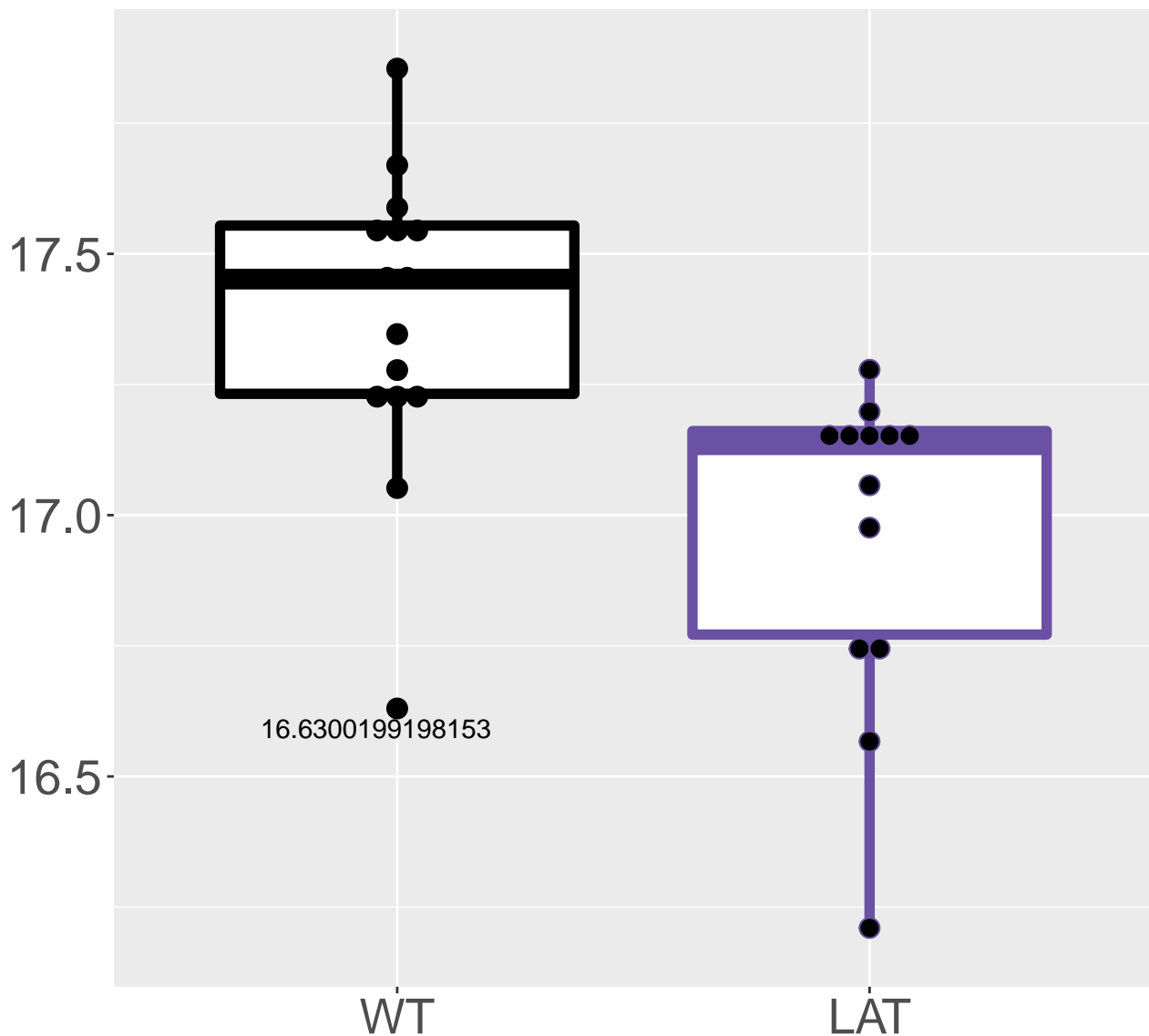
**M989.3204T639.87**

**FDR = 0.0011, FC = -0.67**



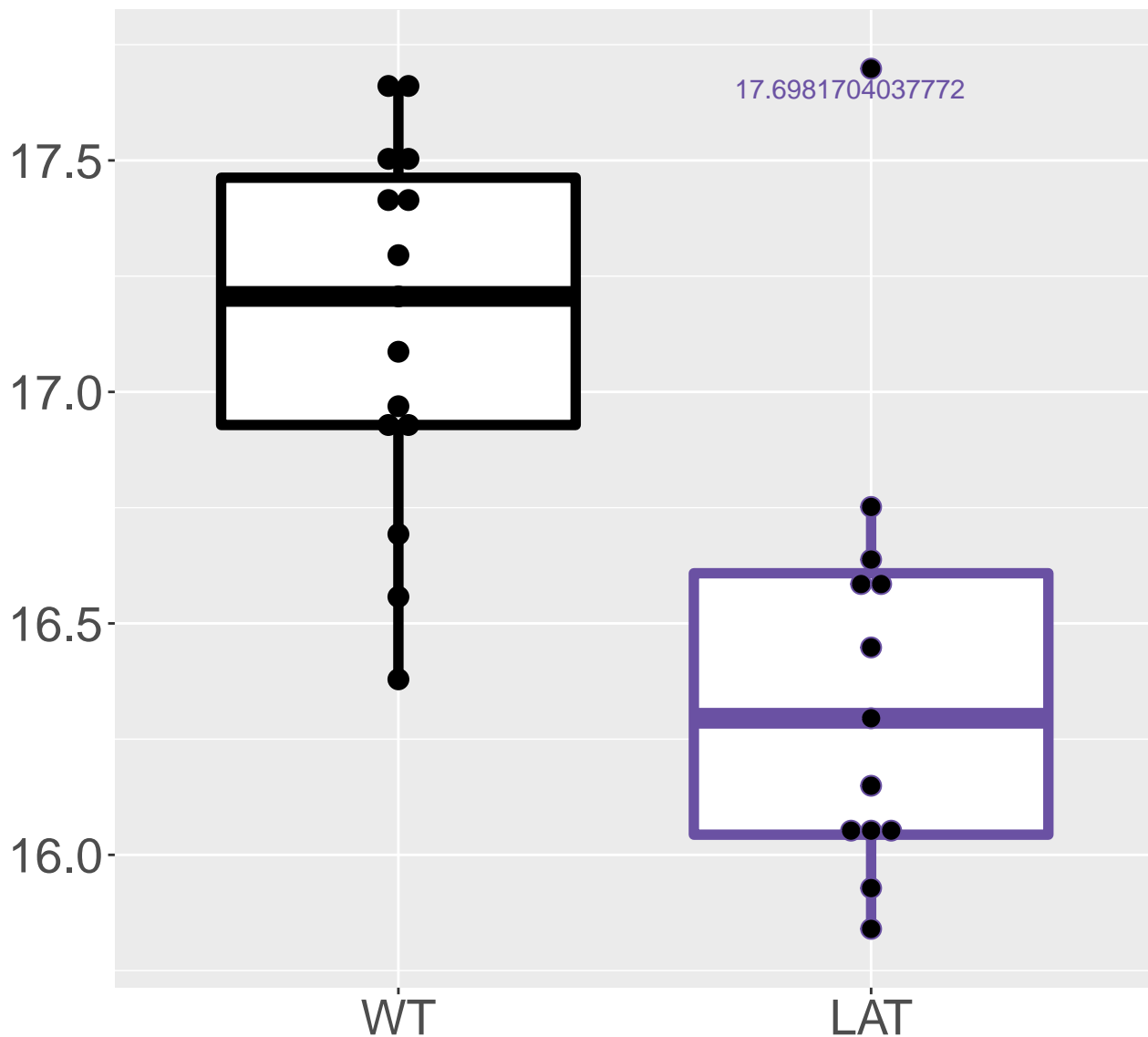
**M314.1098T431.55**

**FDR = 0.0011, FC = -0.41, sex\***

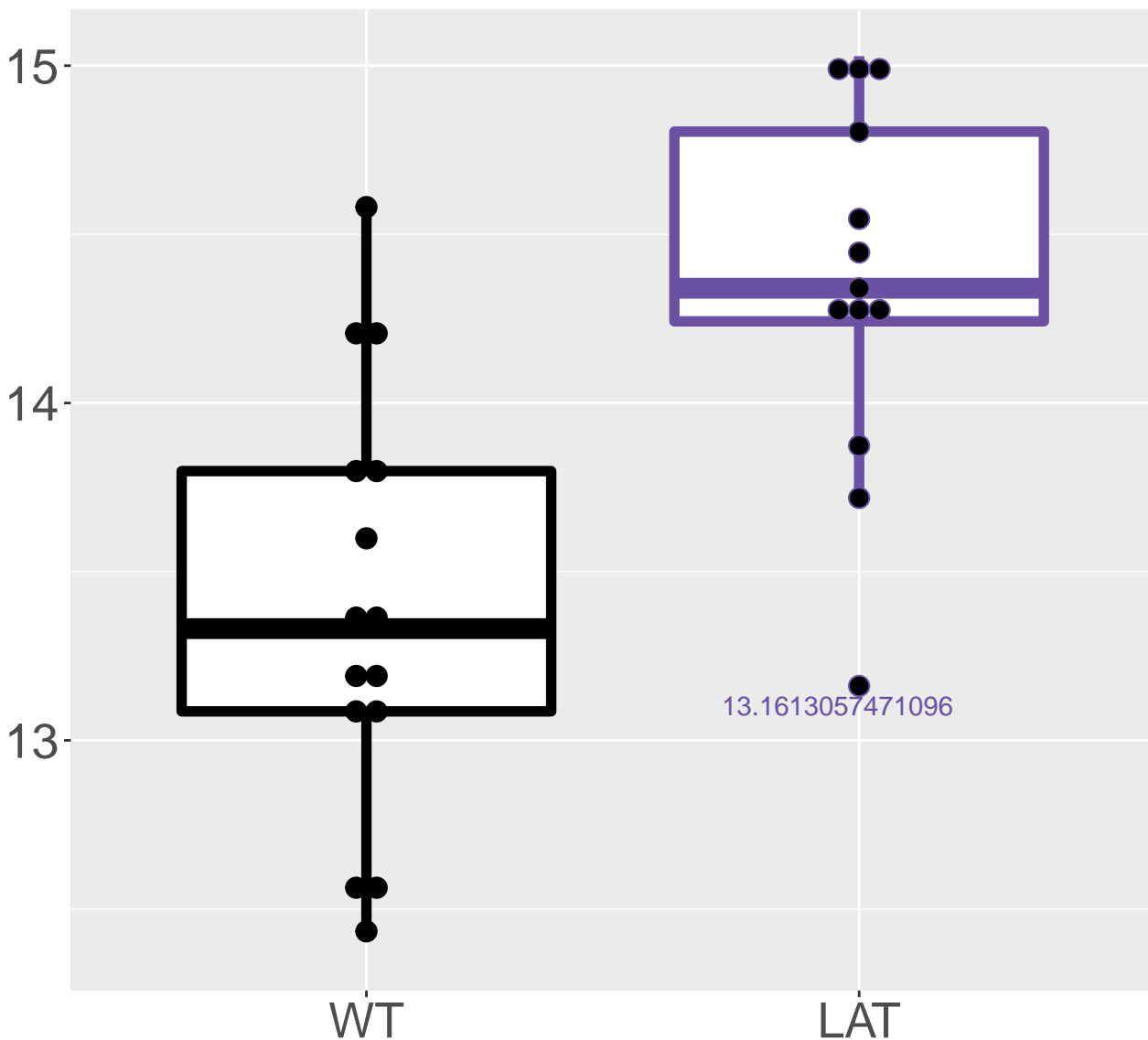


**M587.1839T608.07**

**FDR = 0.0011, FC = -0.76**

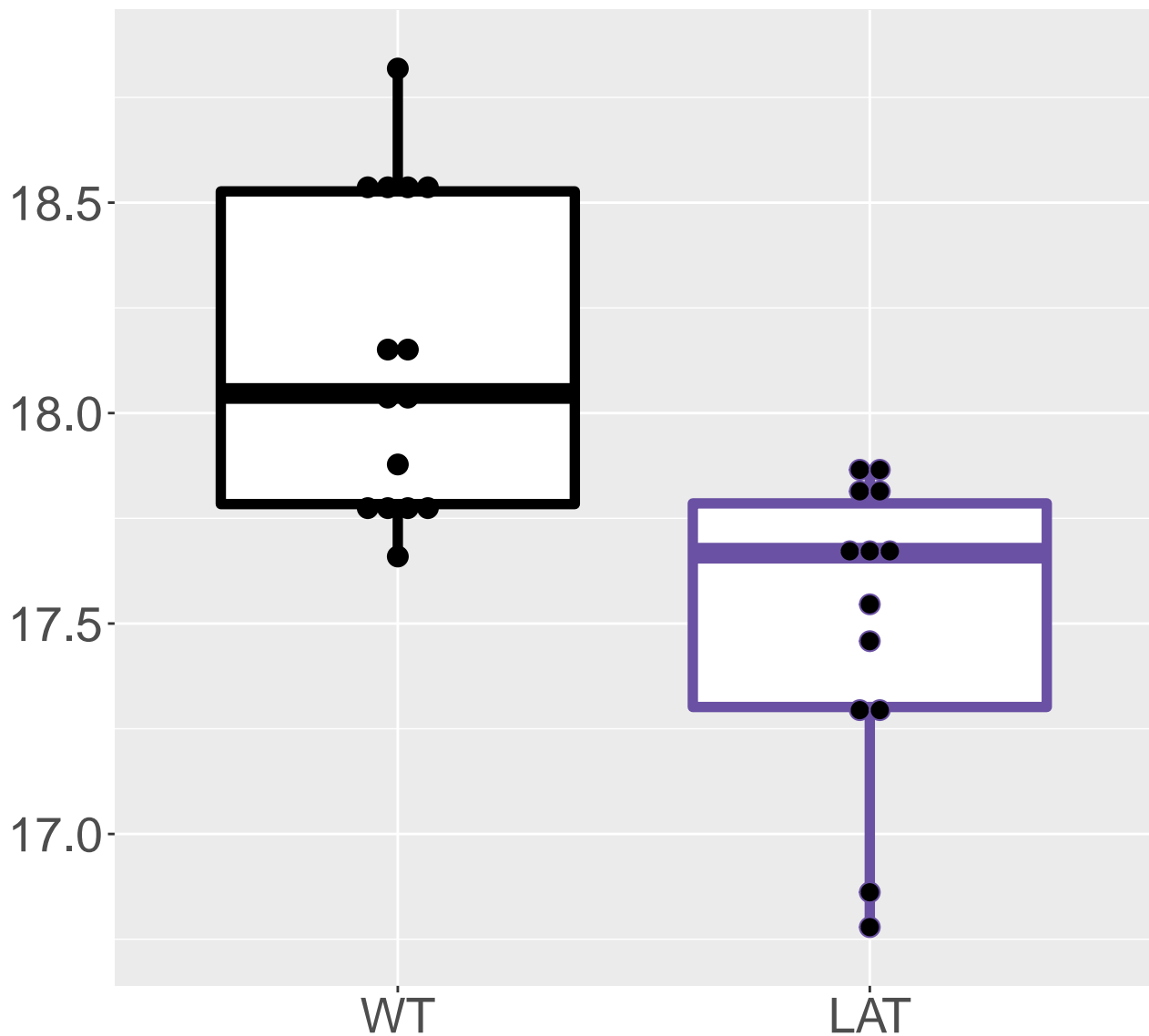


**M486.672T667.6**  
**FDR = 0.0011, FC = 0.96**

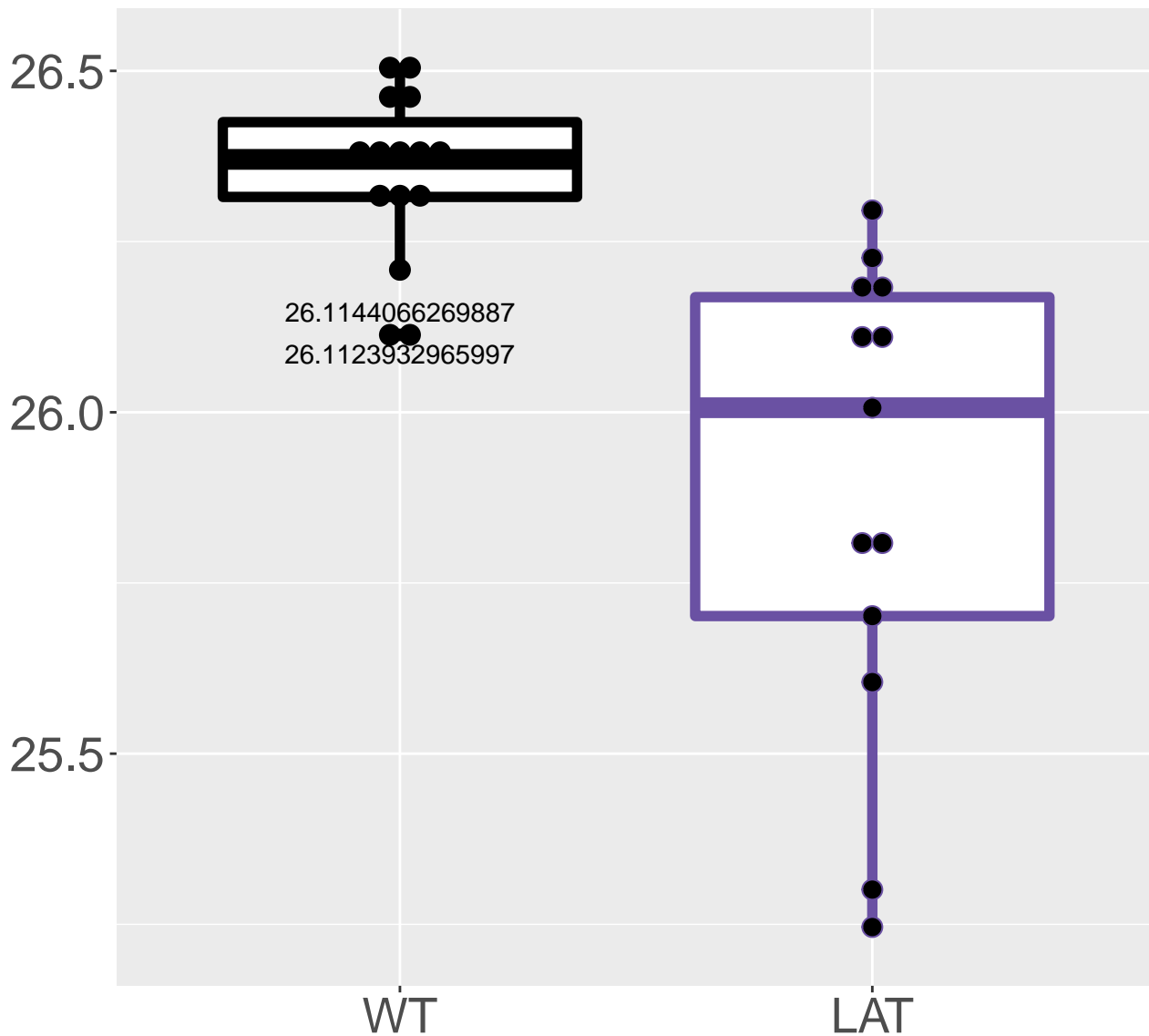


**M326.1098T521.62**

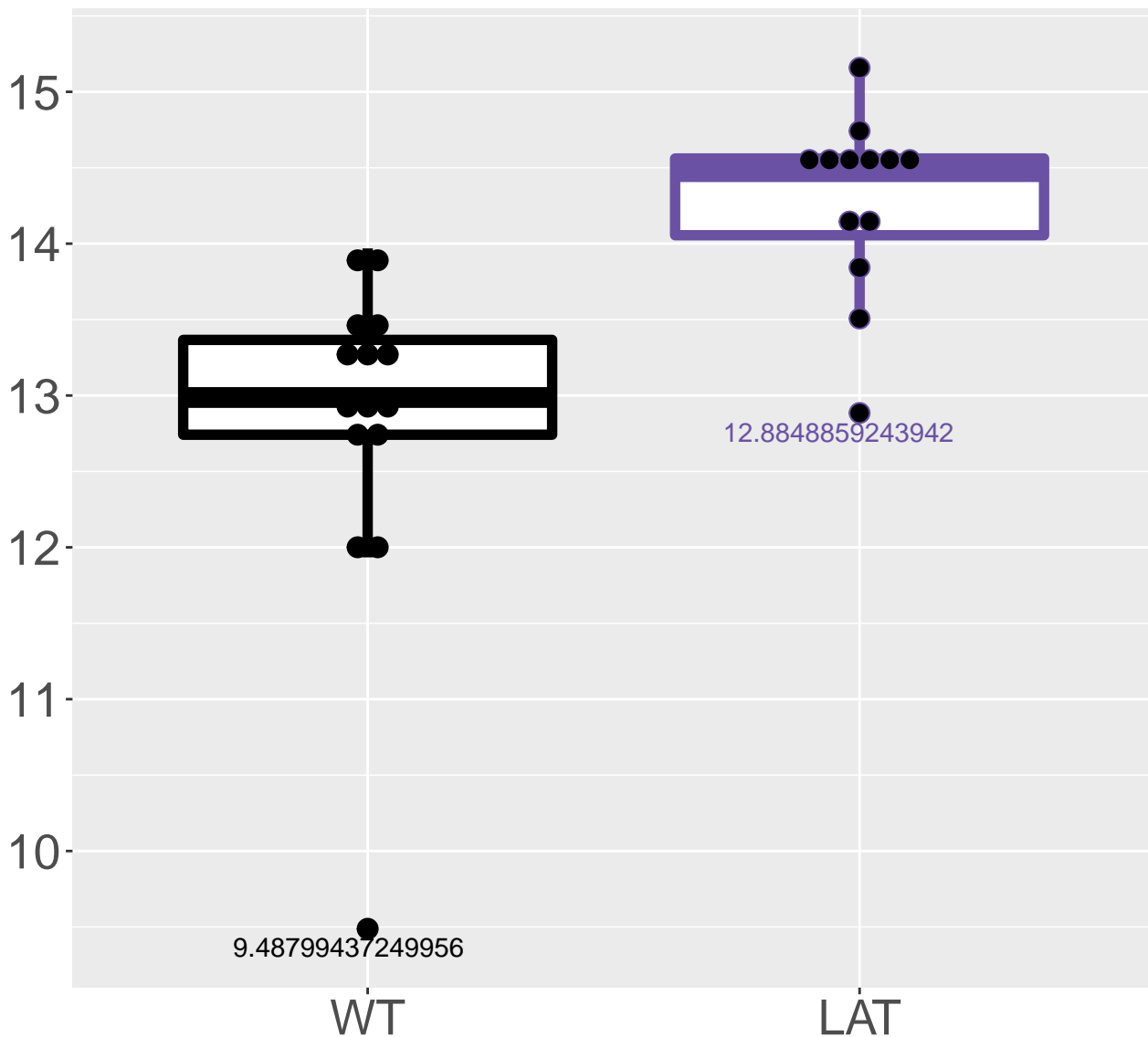
**FDR = 0.0011, FC = -0.63**



**L-Valine;Valine**  
**FDR = 0.0011, FC = -0.46**



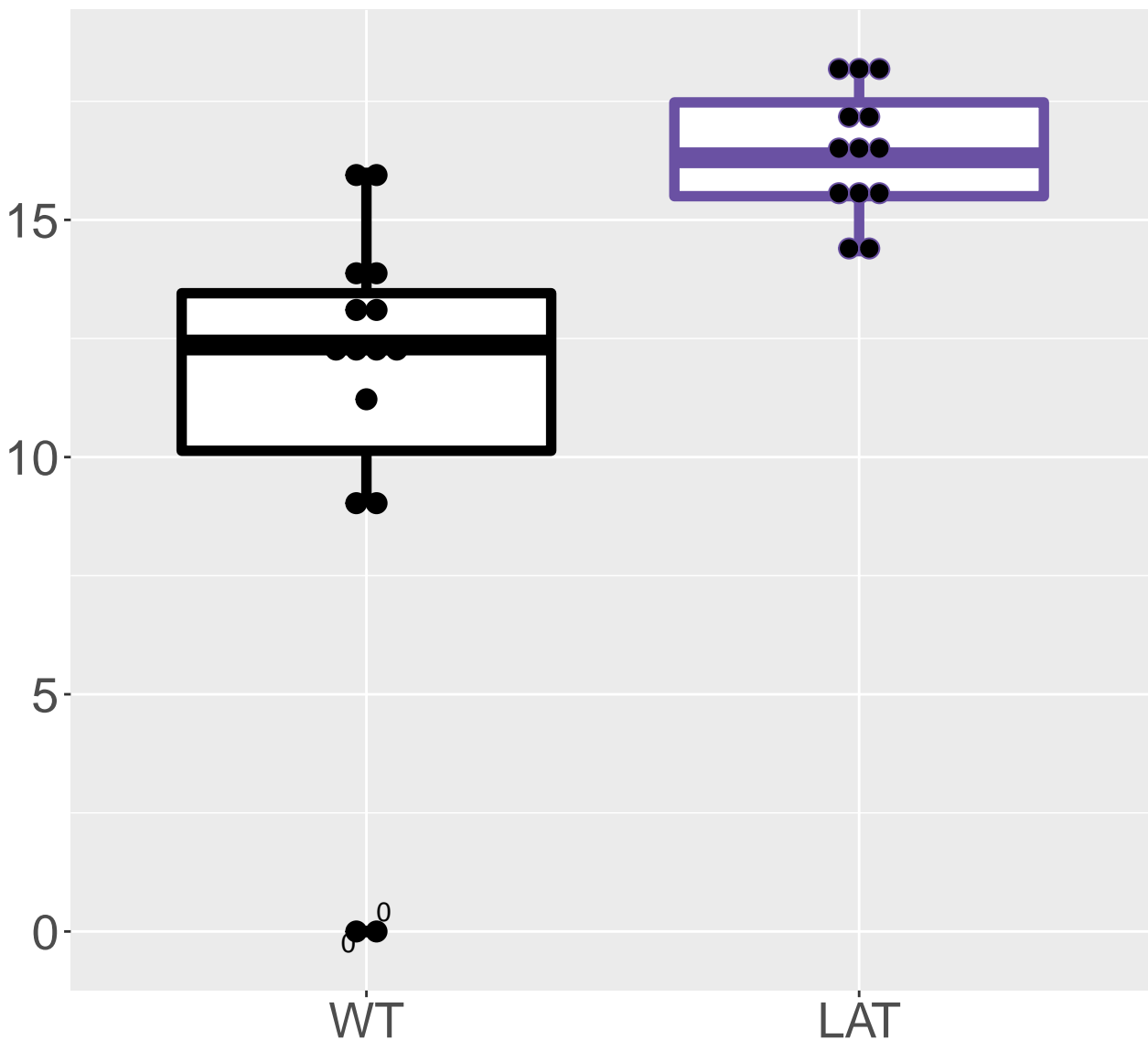
**M681.6334T617.92**  
**FDR = 0.0012, FC = 1.5**



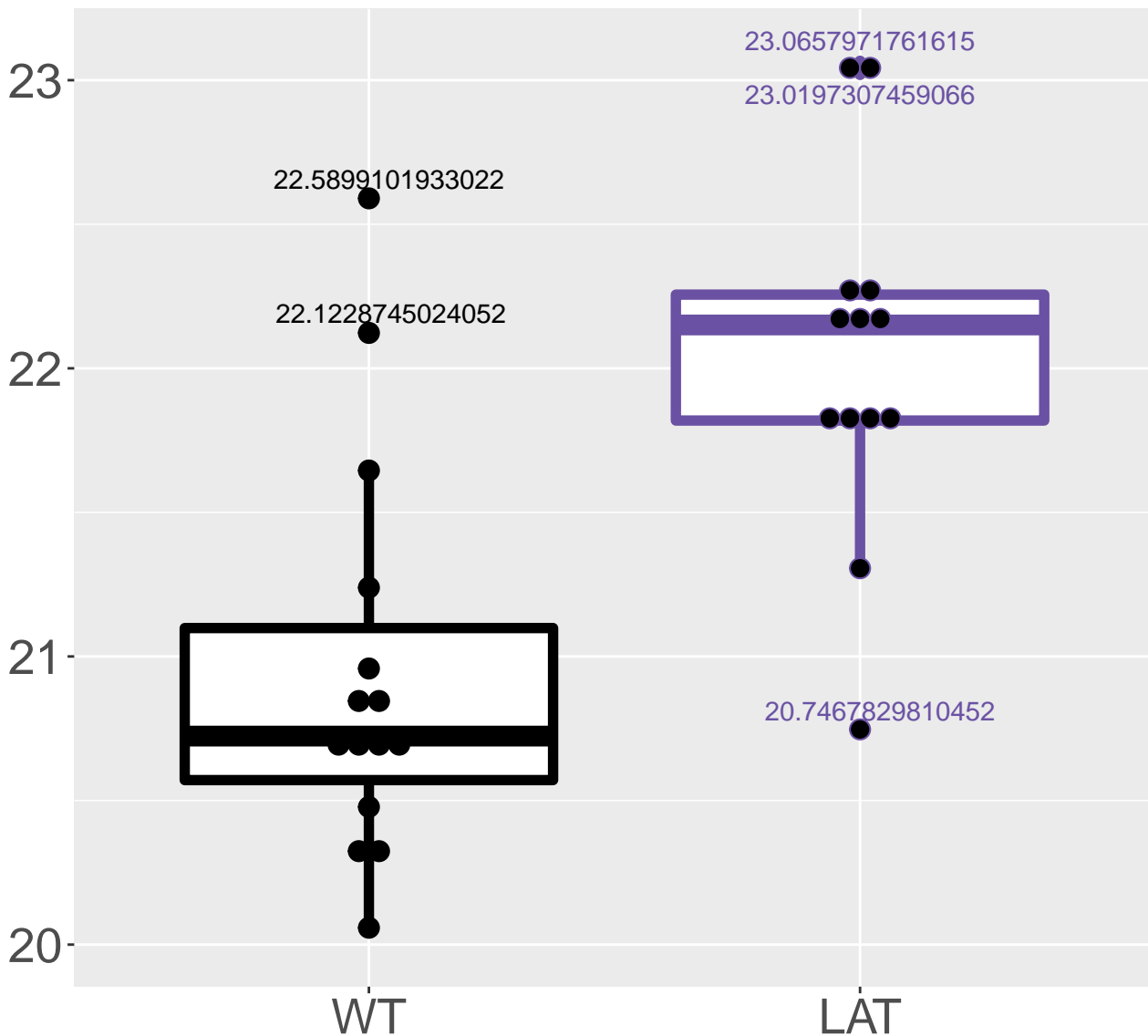


**M368.9998T609.4**

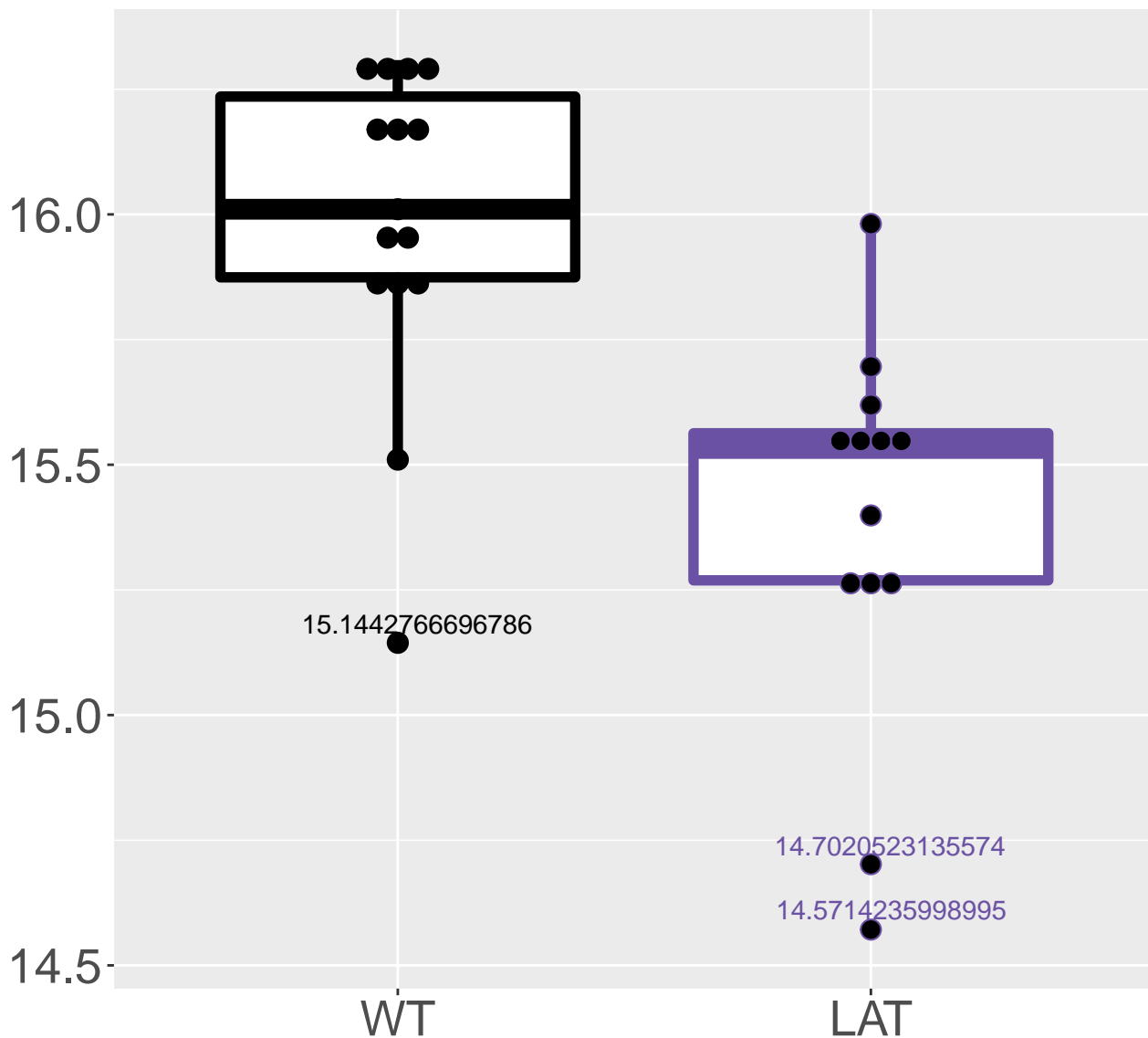
**FDR = 0.0012, FC = 5.5**



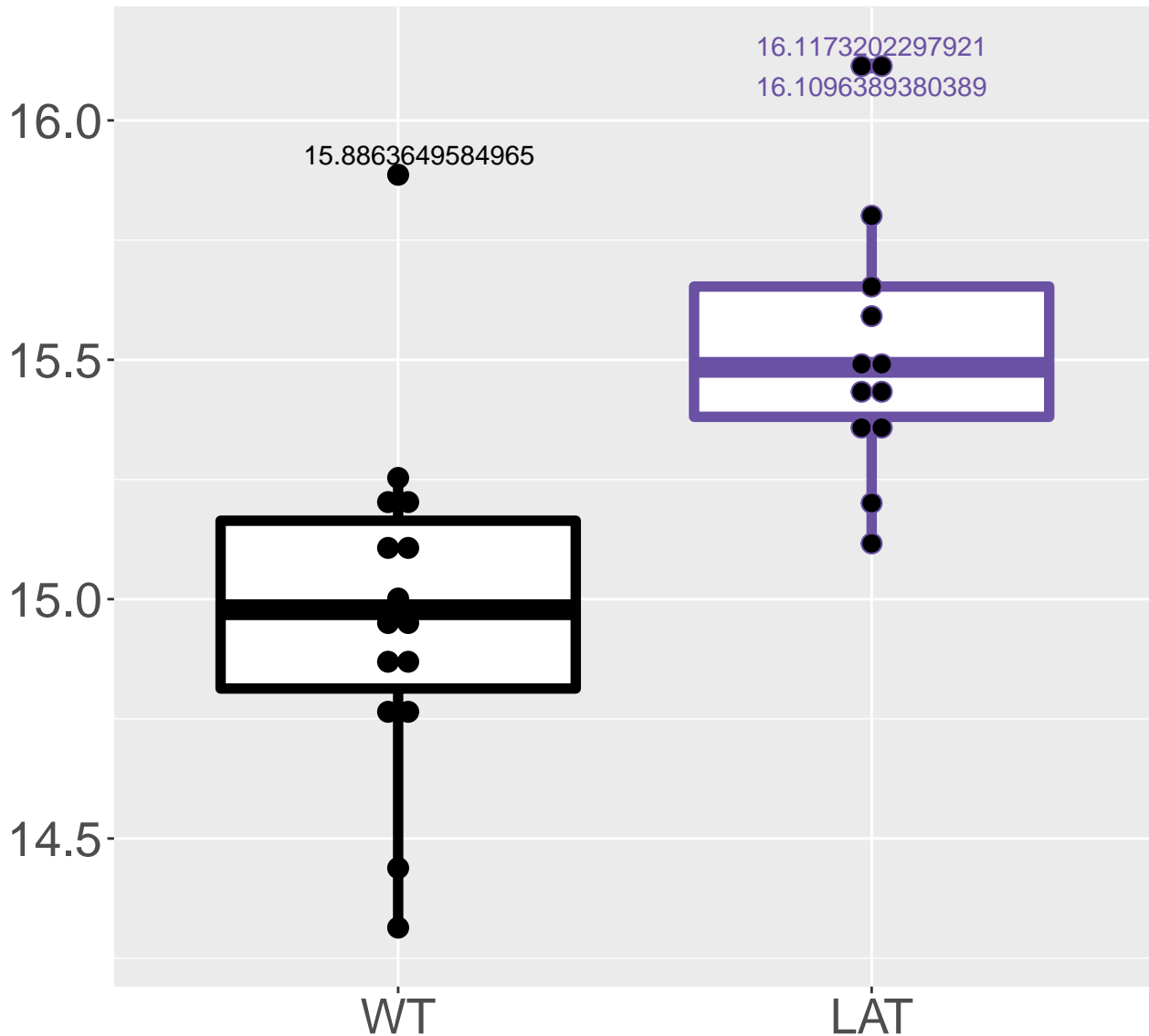
**M82.9542T186.2**  
**FDR = 0.0012, FC = 1.1**



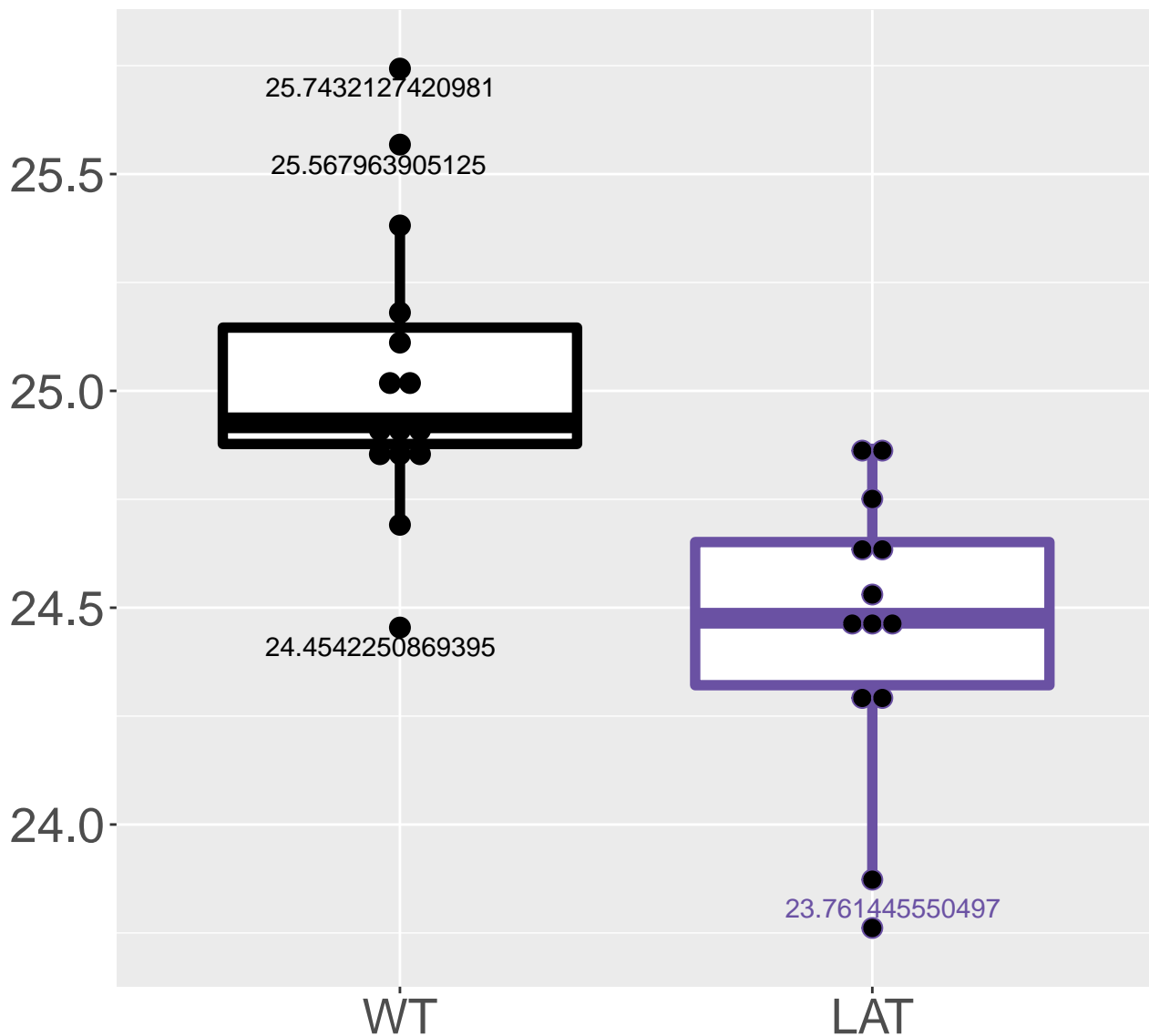
**FDR = 0.0012, FC = -0.61**



**M239.0235T637.13**  
**FDR = 0.0012, FC = 0.57**

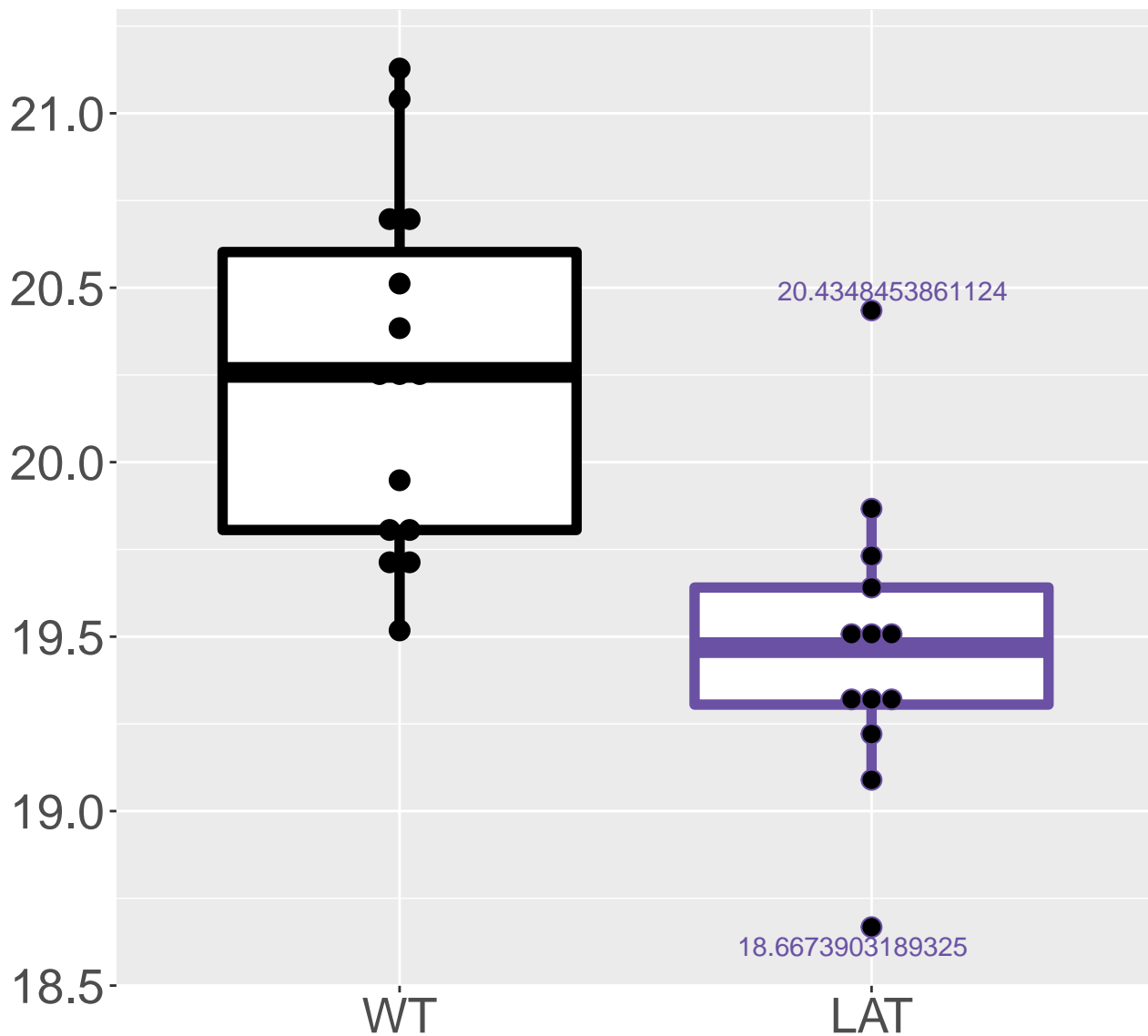


**L-Proline;Proline**  
**FDR = 0.0012, FC = -0.58**



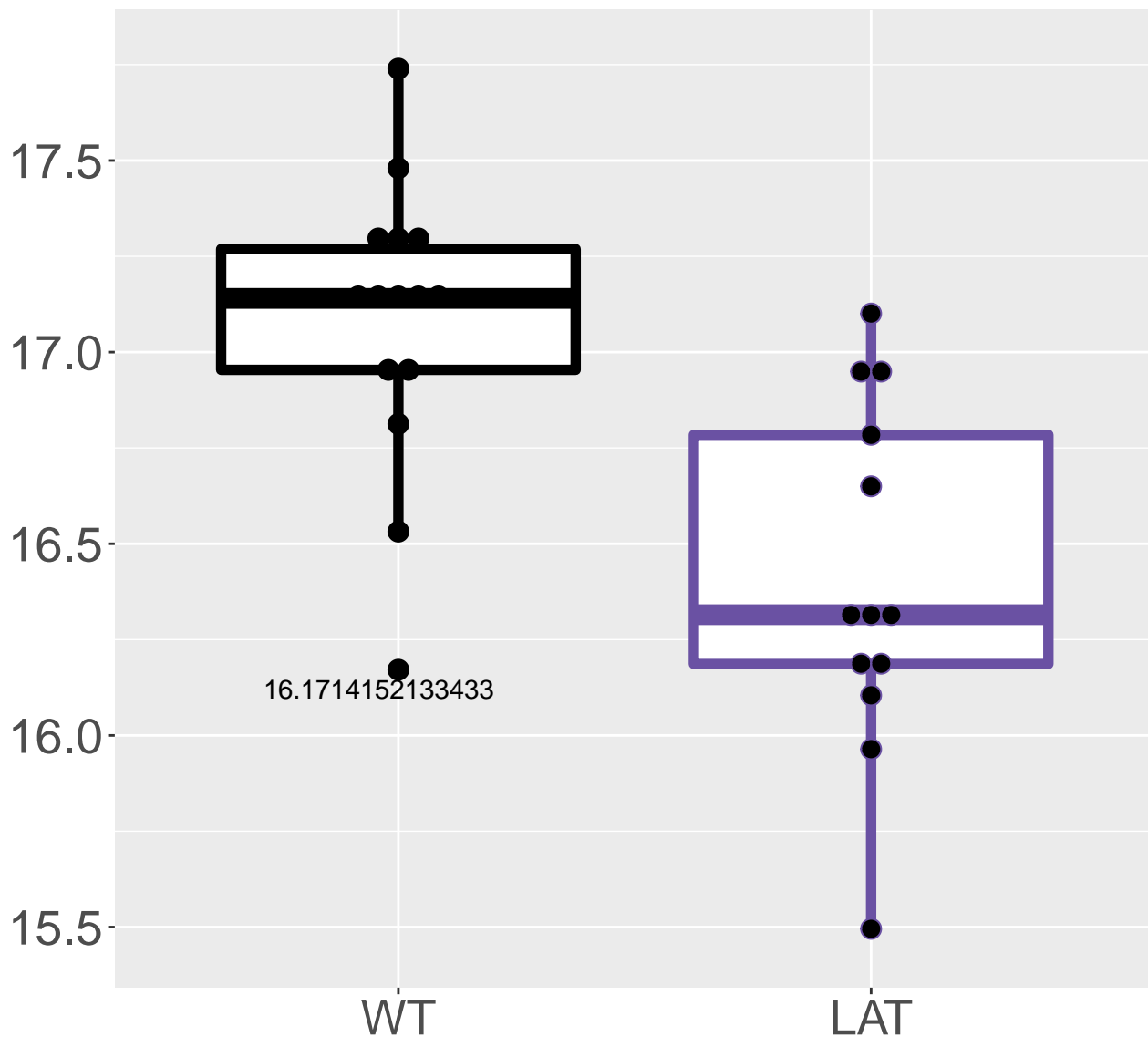
**M448.1137T551.94**

**FDR = 0.0013, FC = -0.78**



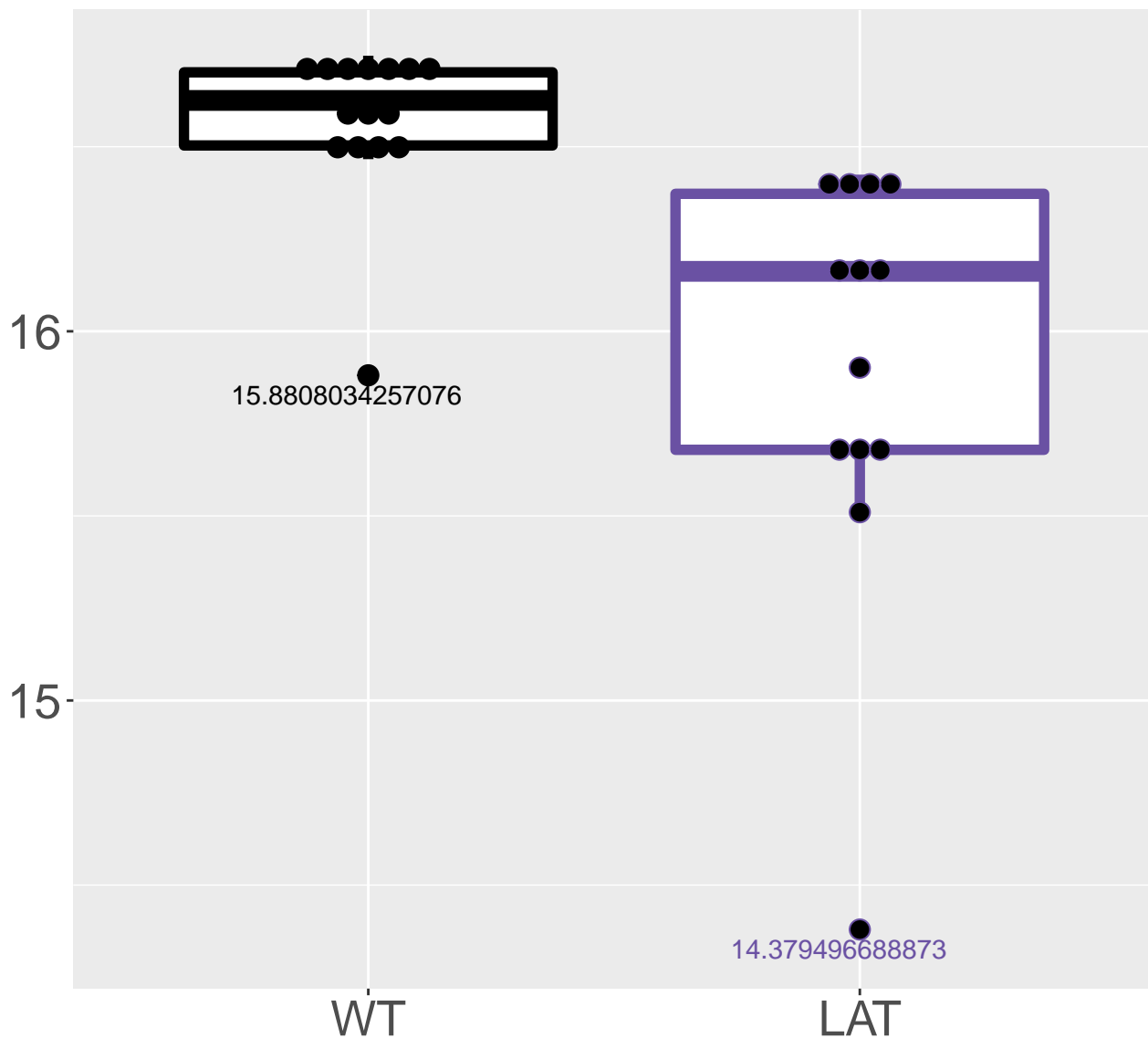
**M797.3054T582.93**

**FDR = 0.0013, FC = -0.67**



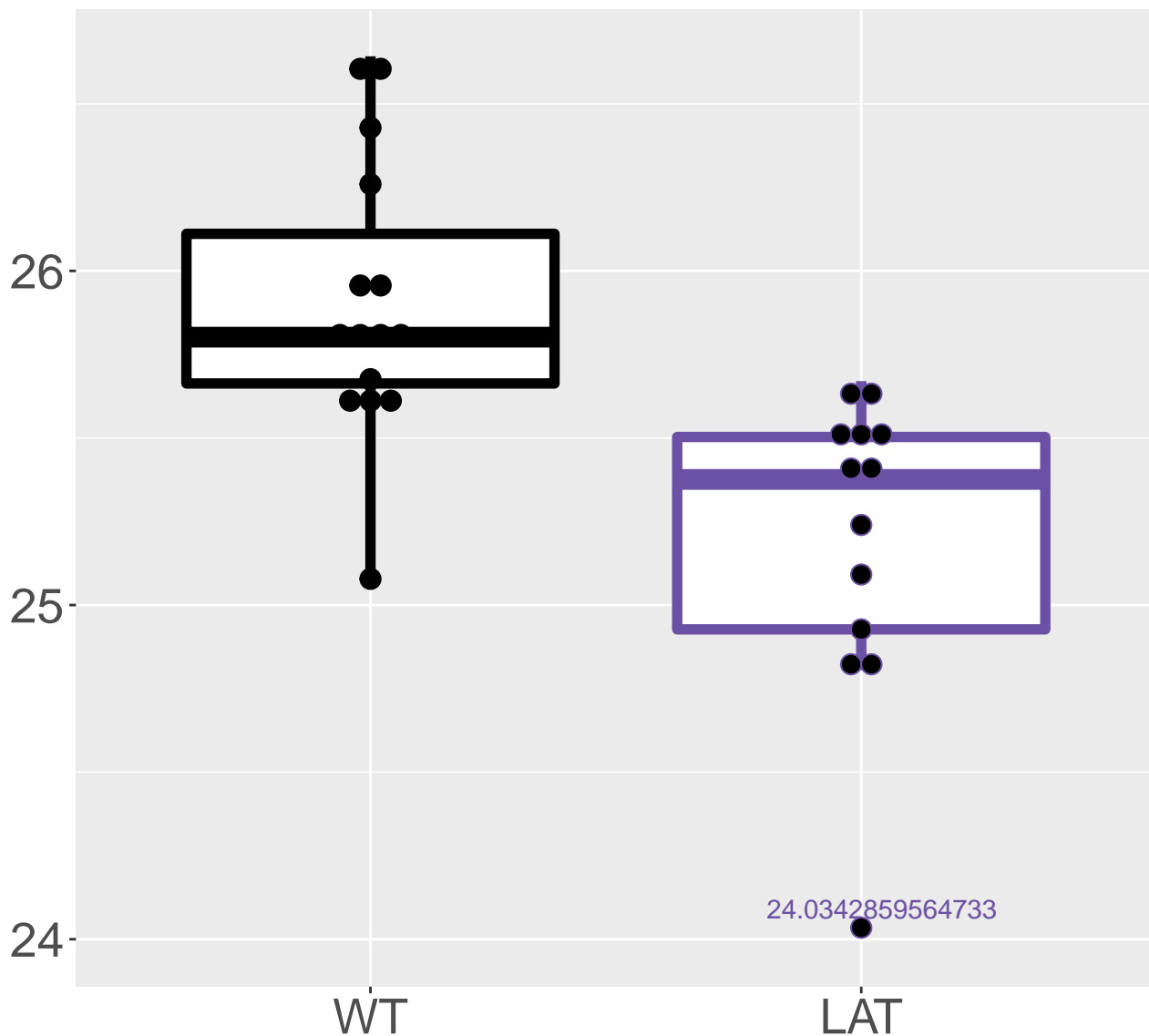
**M301.0442T358.44**

**FDR = 0.0013, FC = -0.66**

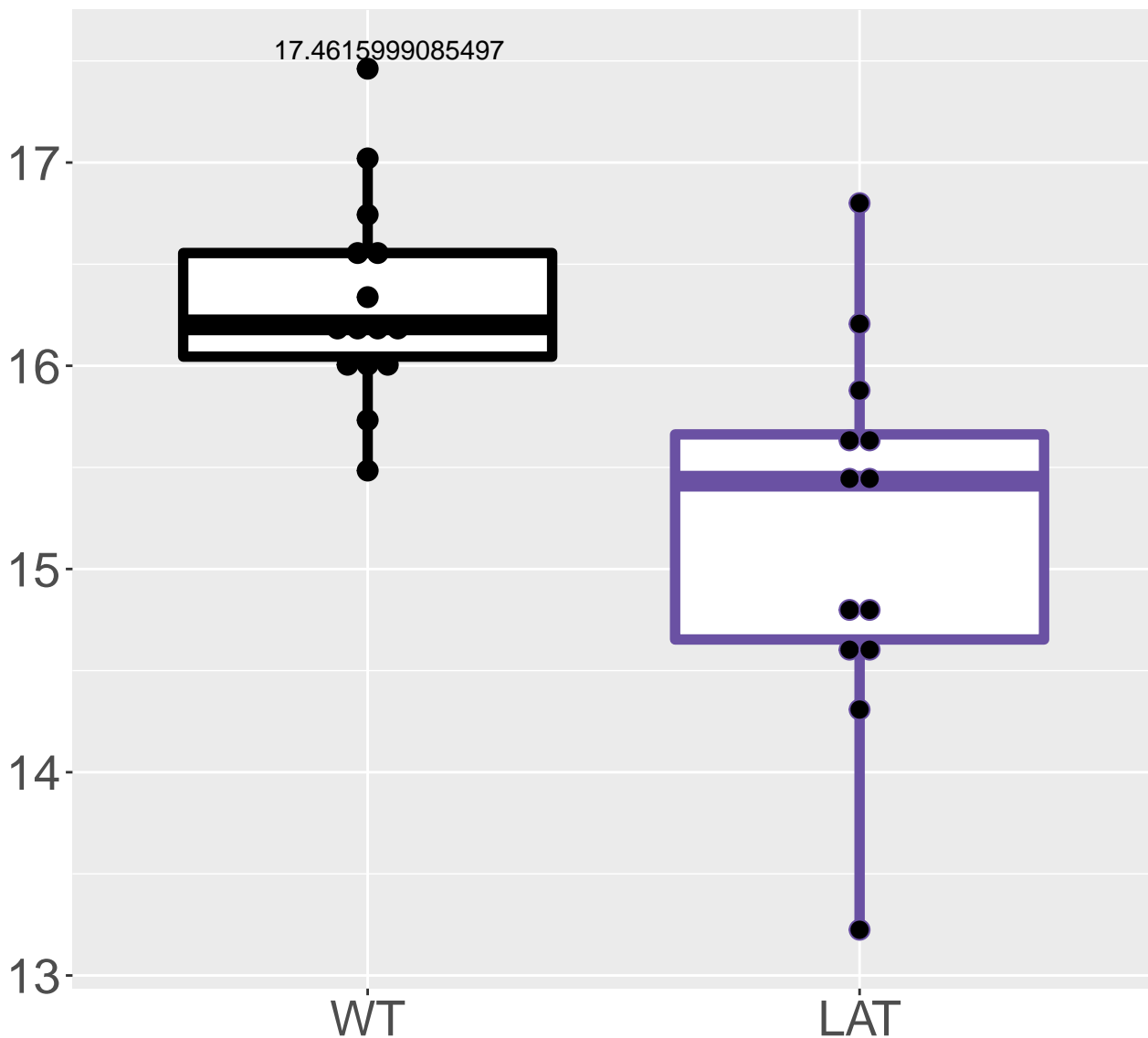




**L-Glutamic acid; Glutamic acid; Glu|N-Methyl-D**  
**FDR = 0.0013, FC = -0.71**

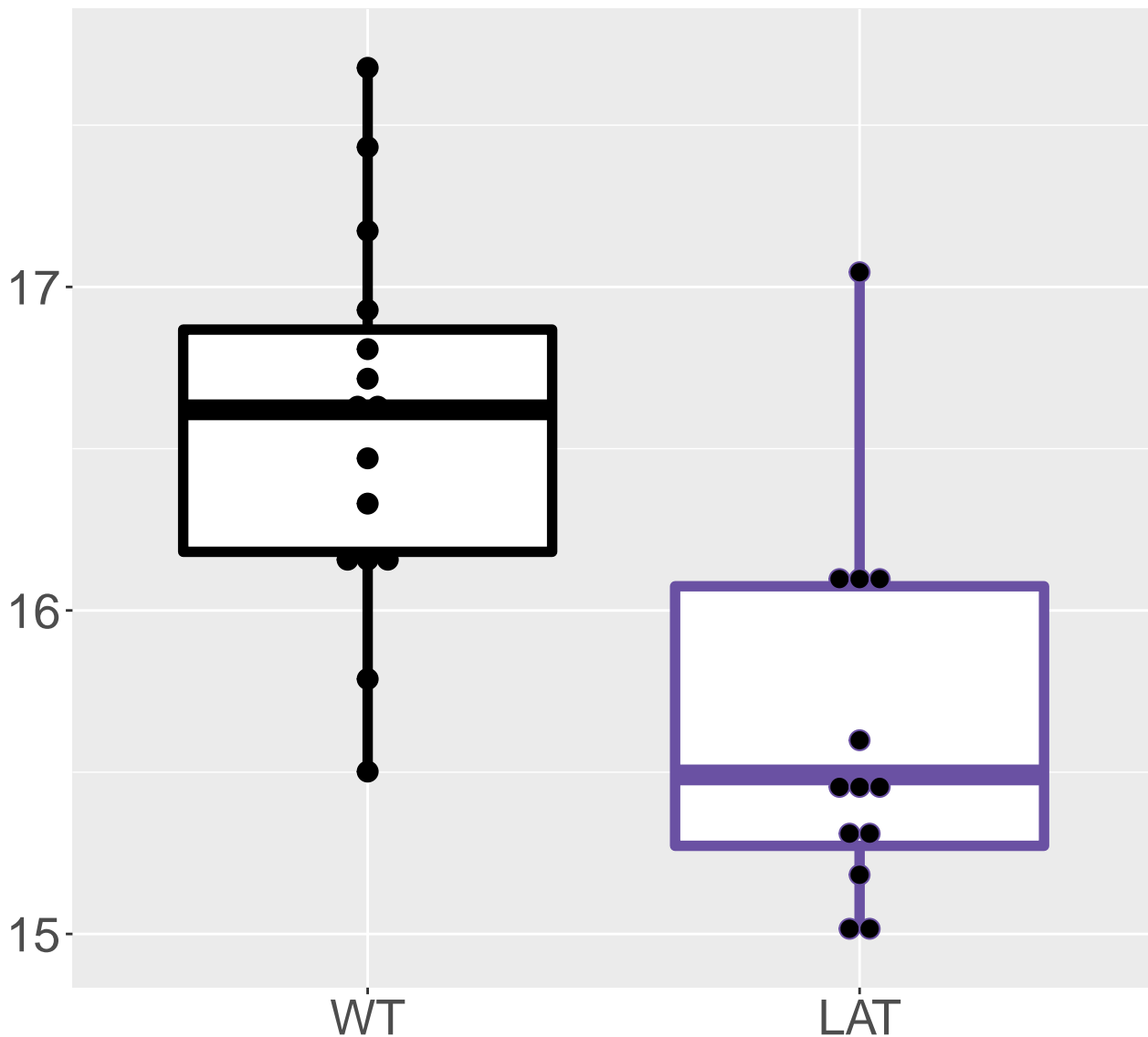


**M977.155T545.47**  
**FDR = 0.0013, FC = -1.1**



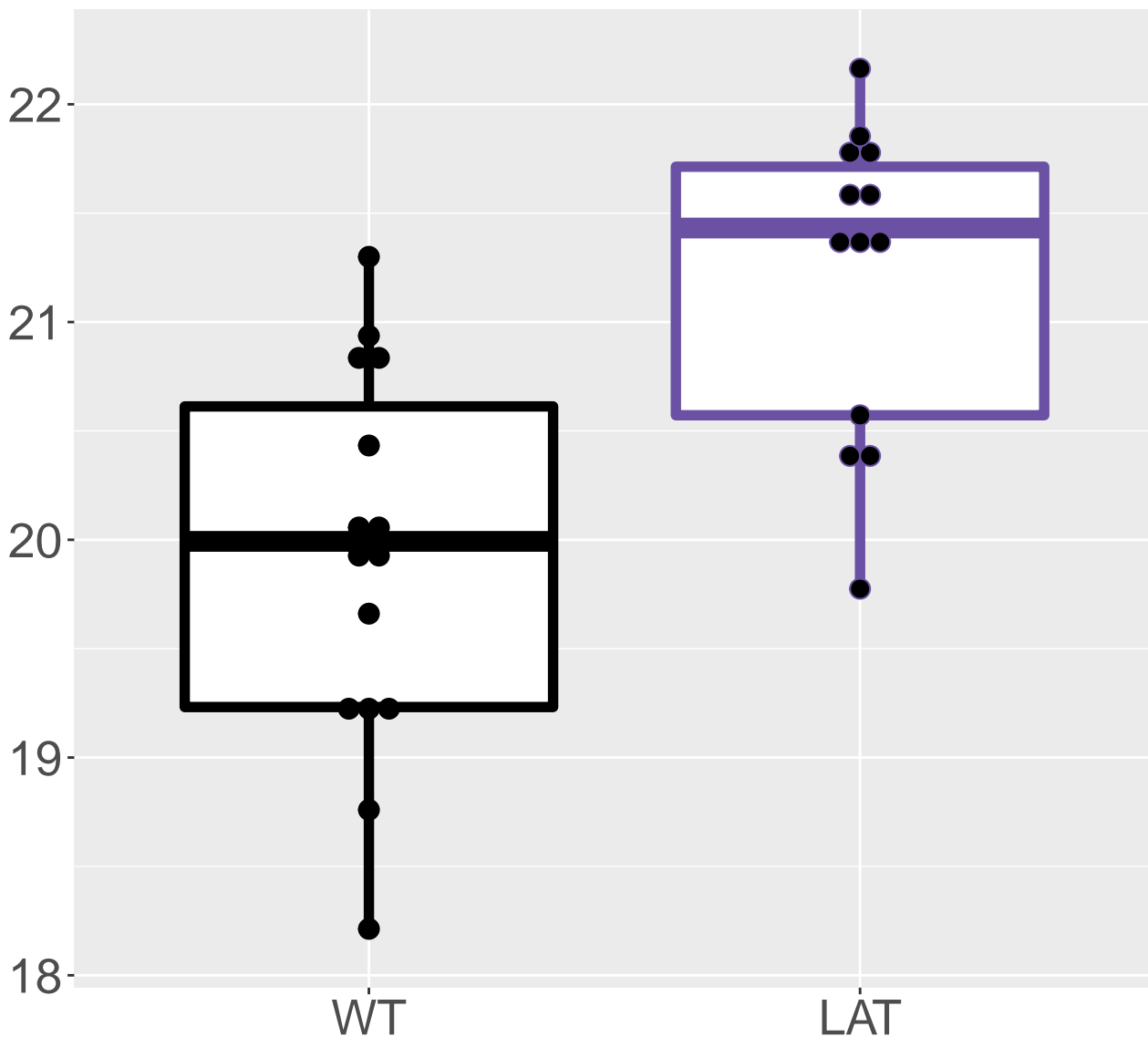
**M606.1939T649.65\_2**

**FDR = 0.0013, FC = -0.94**

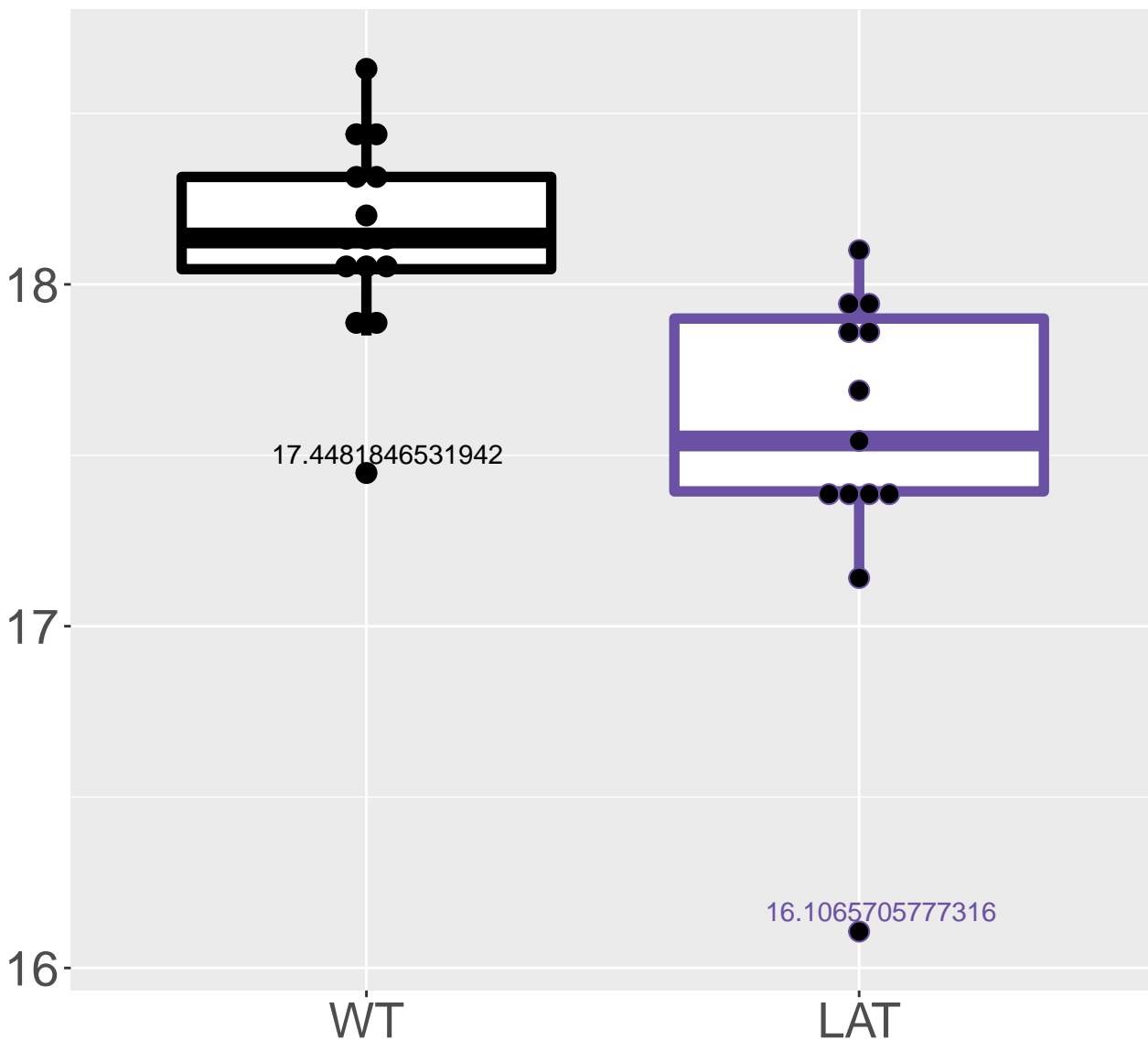


**M535.0852T589.51**

**FDR = 0.0014, FC = 1.3**



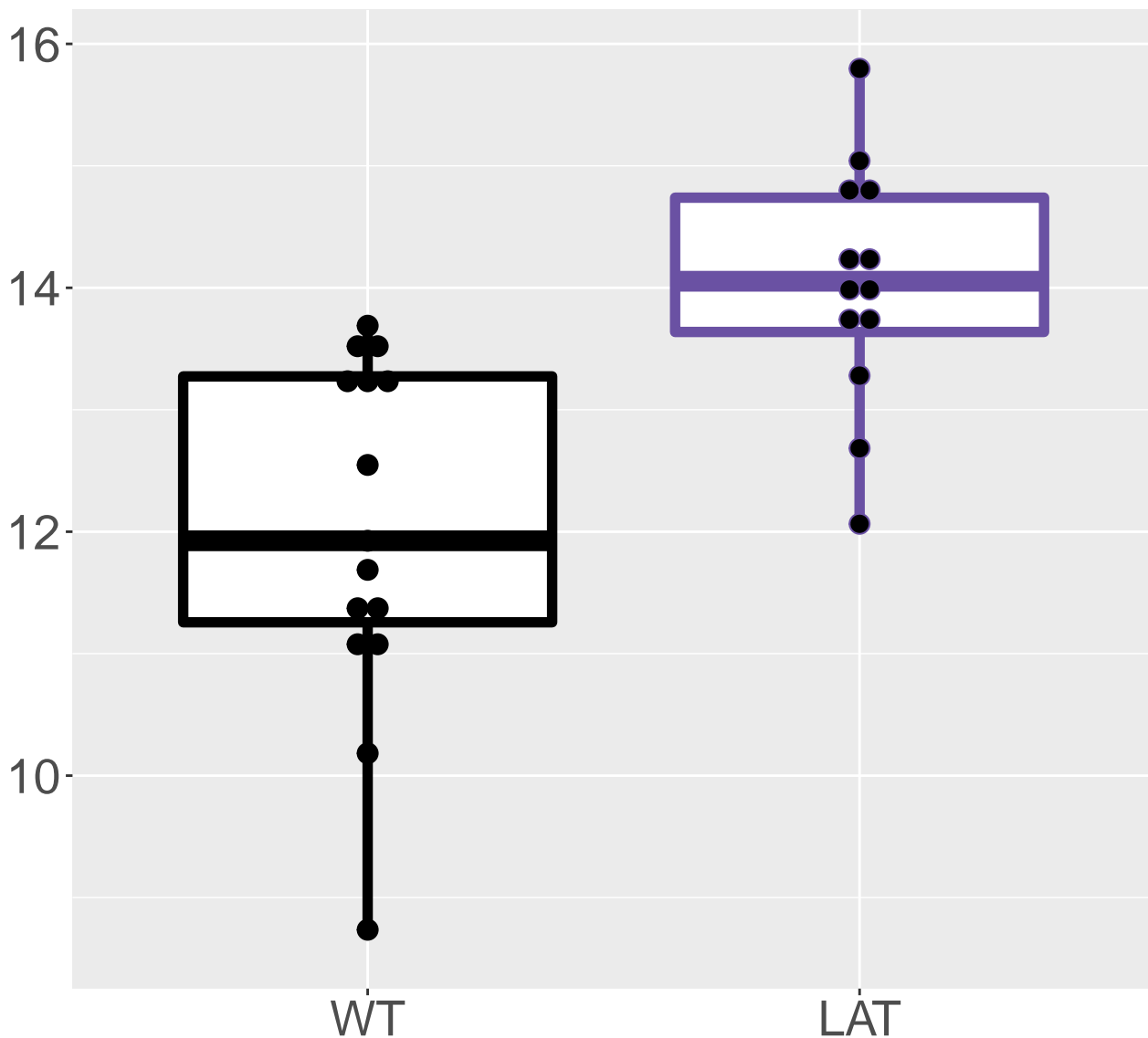
**FDR = 0.0014, FC = -0.62**





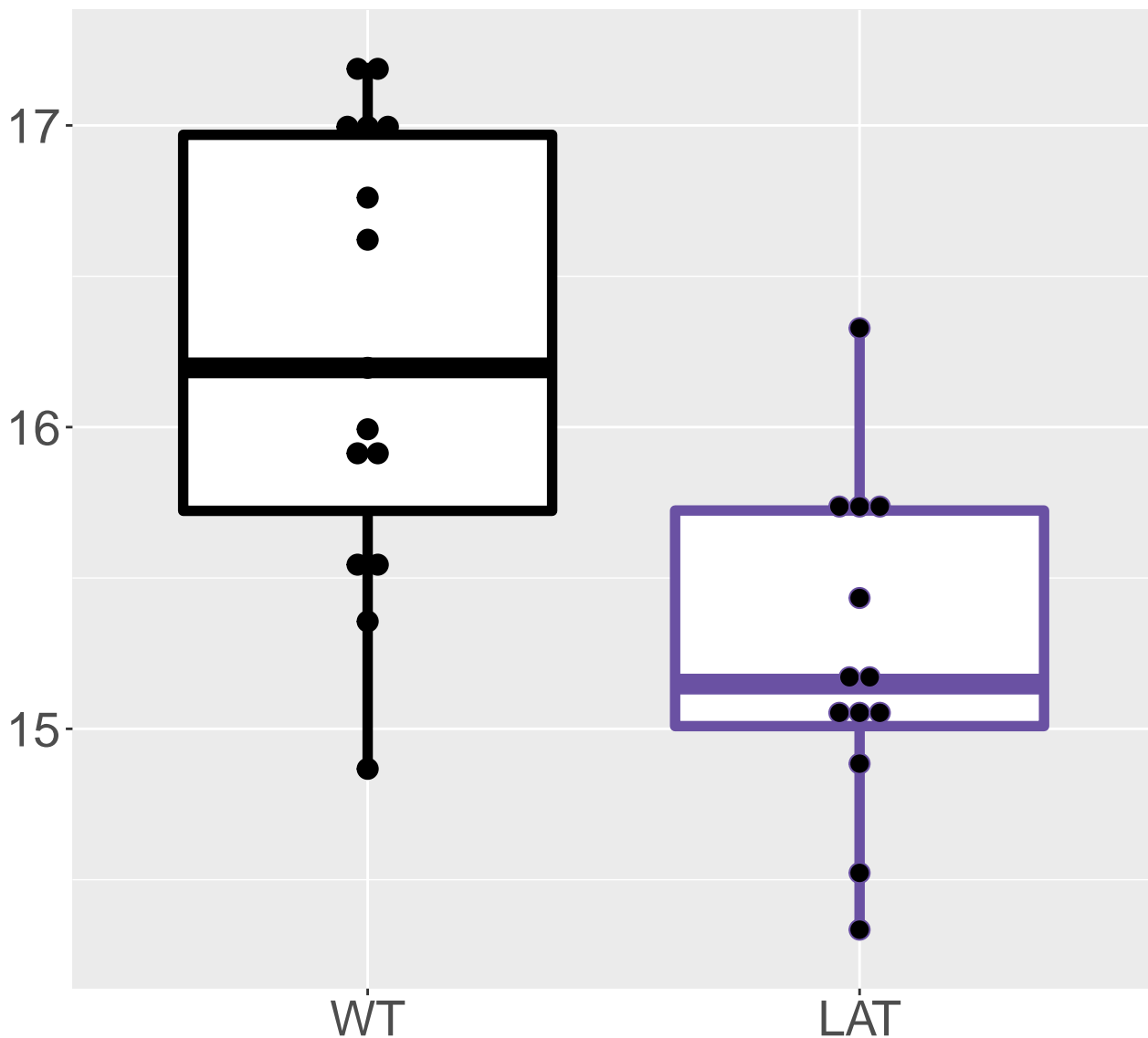
**M286.0339T189.29**

**FDR = 0.0014, FC = 2**



**M437.071T546.12**

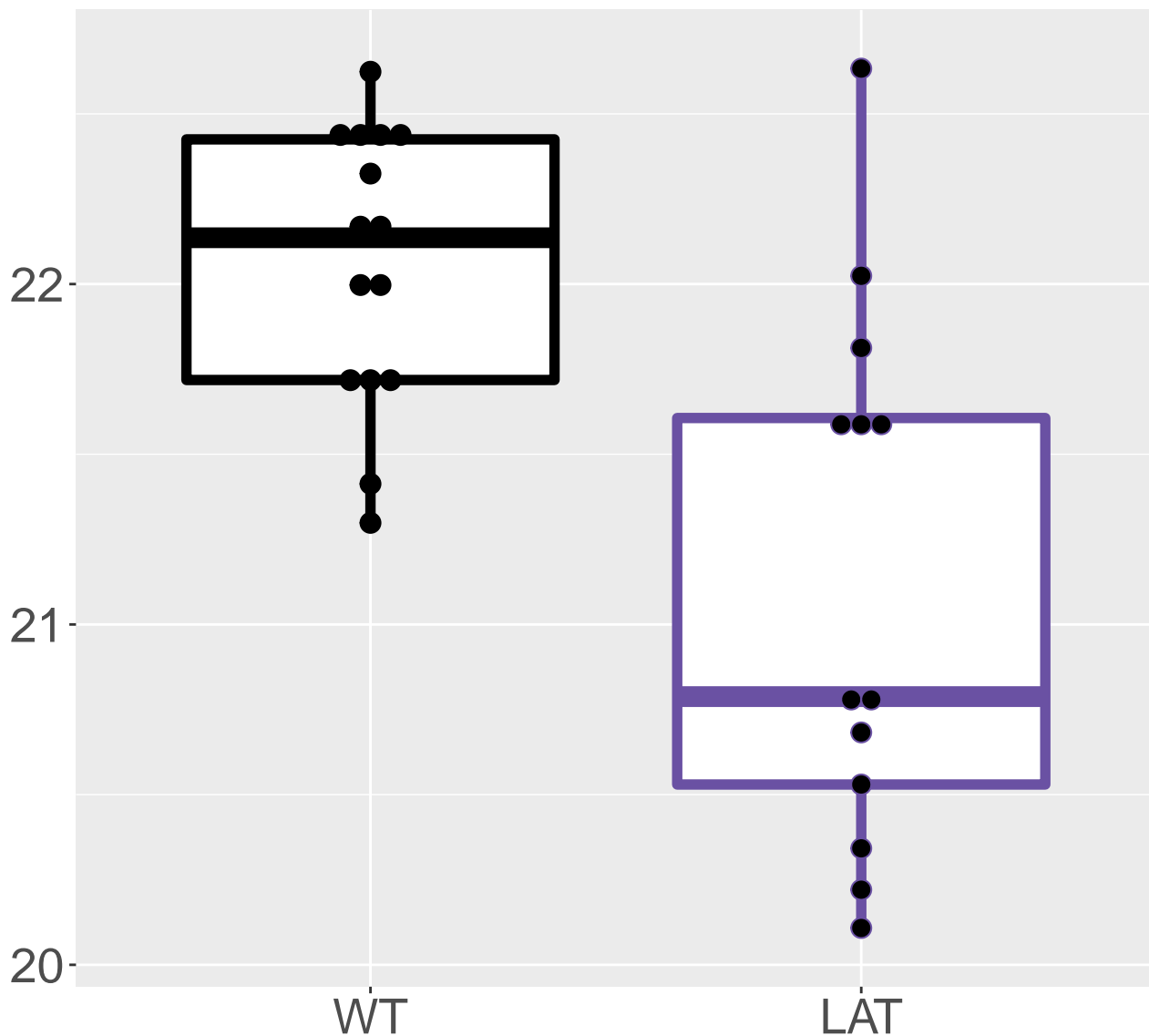
**FDR = 0.0014, FC = -1**





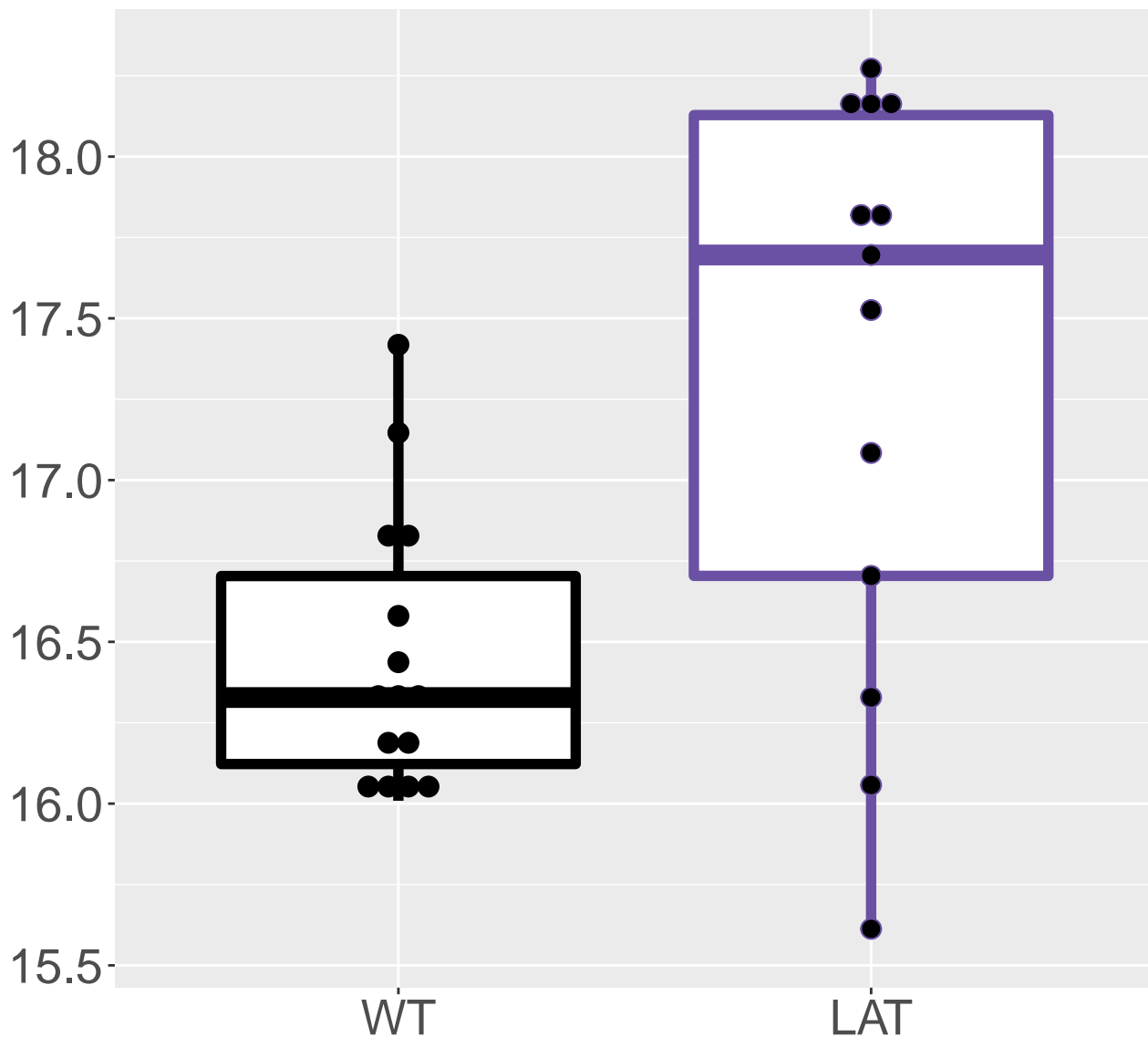
**M278.0884T287.23**

**FDR = 0.0015, FC = -0.93**



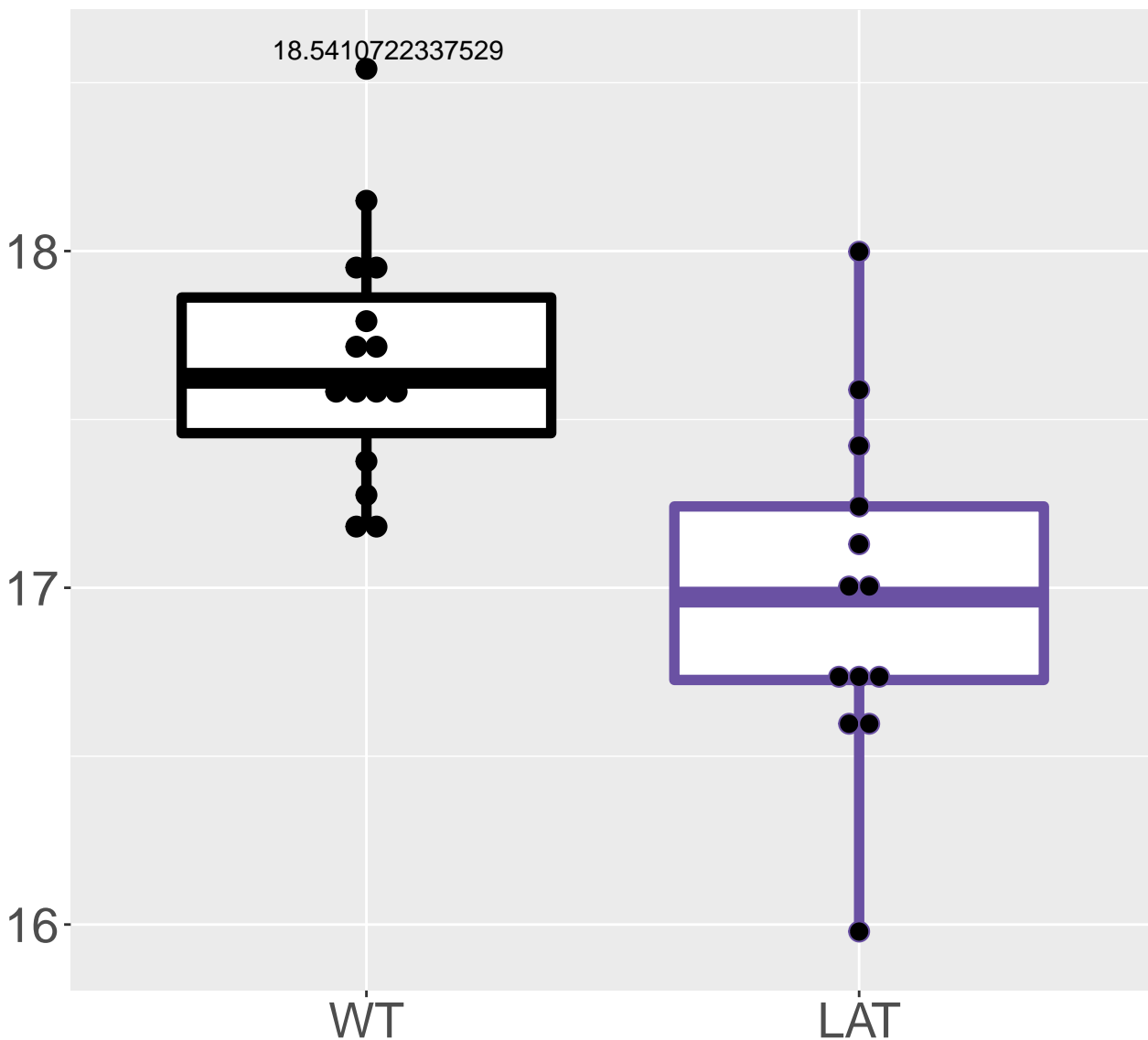
**M885.2615T578.4**

**FDR = 0.0015, FC = 0.88, sex\*\***



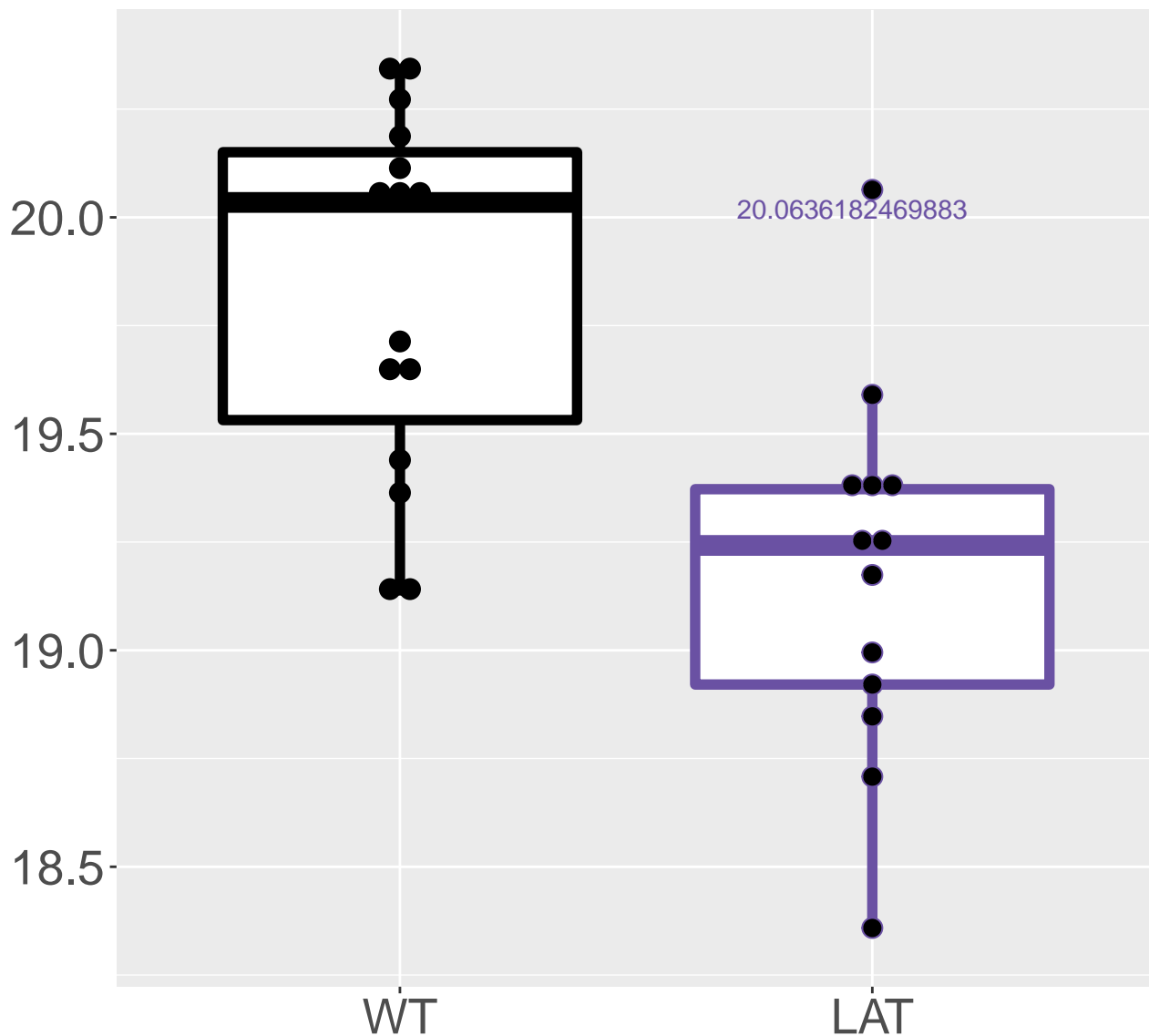
**M539.0679T546.18**

**FDR = 0.0016, FC = -0.69**

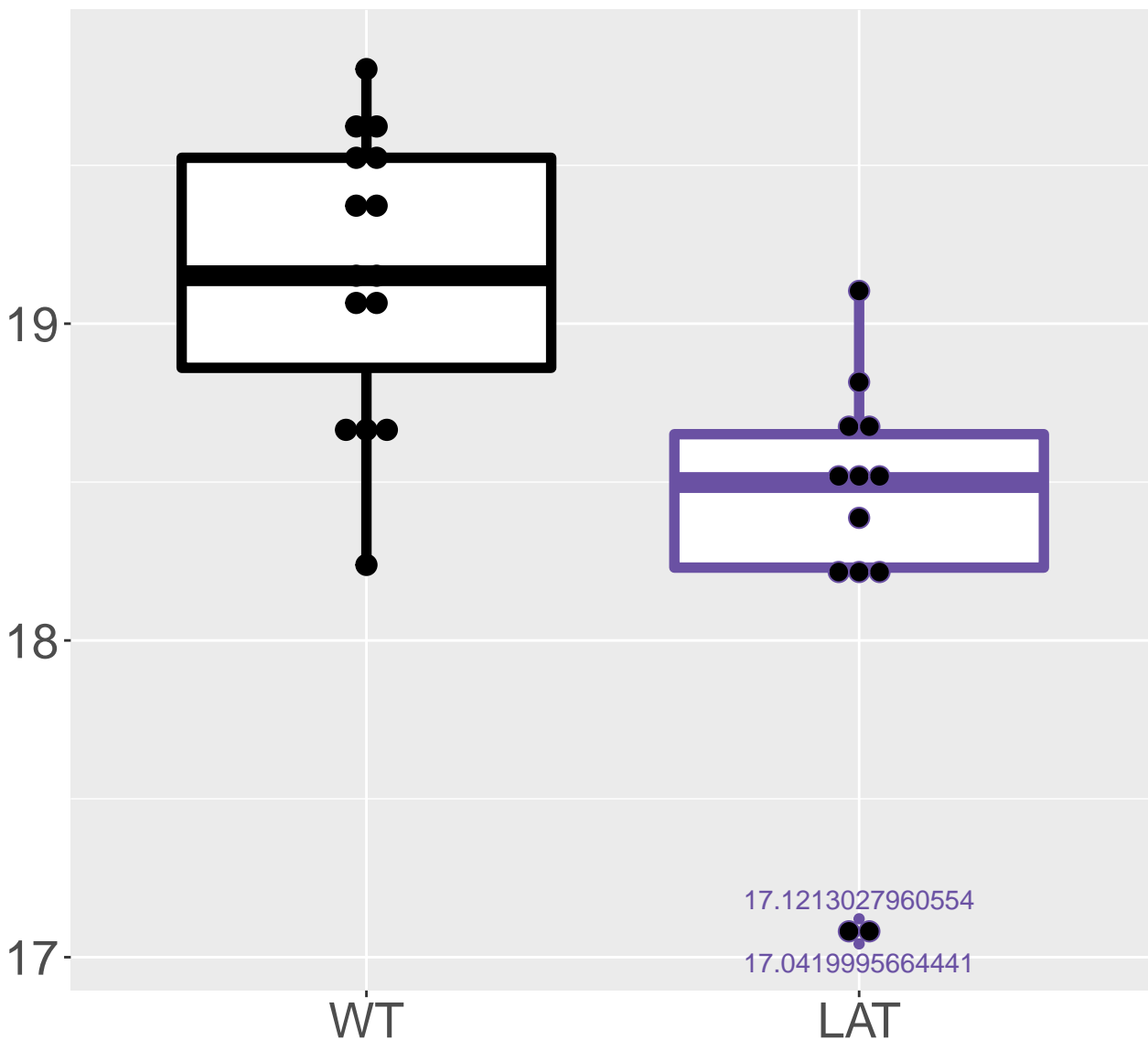


**M323.0988T537.17**

**FDR = 0.0016, FC = -0.66**

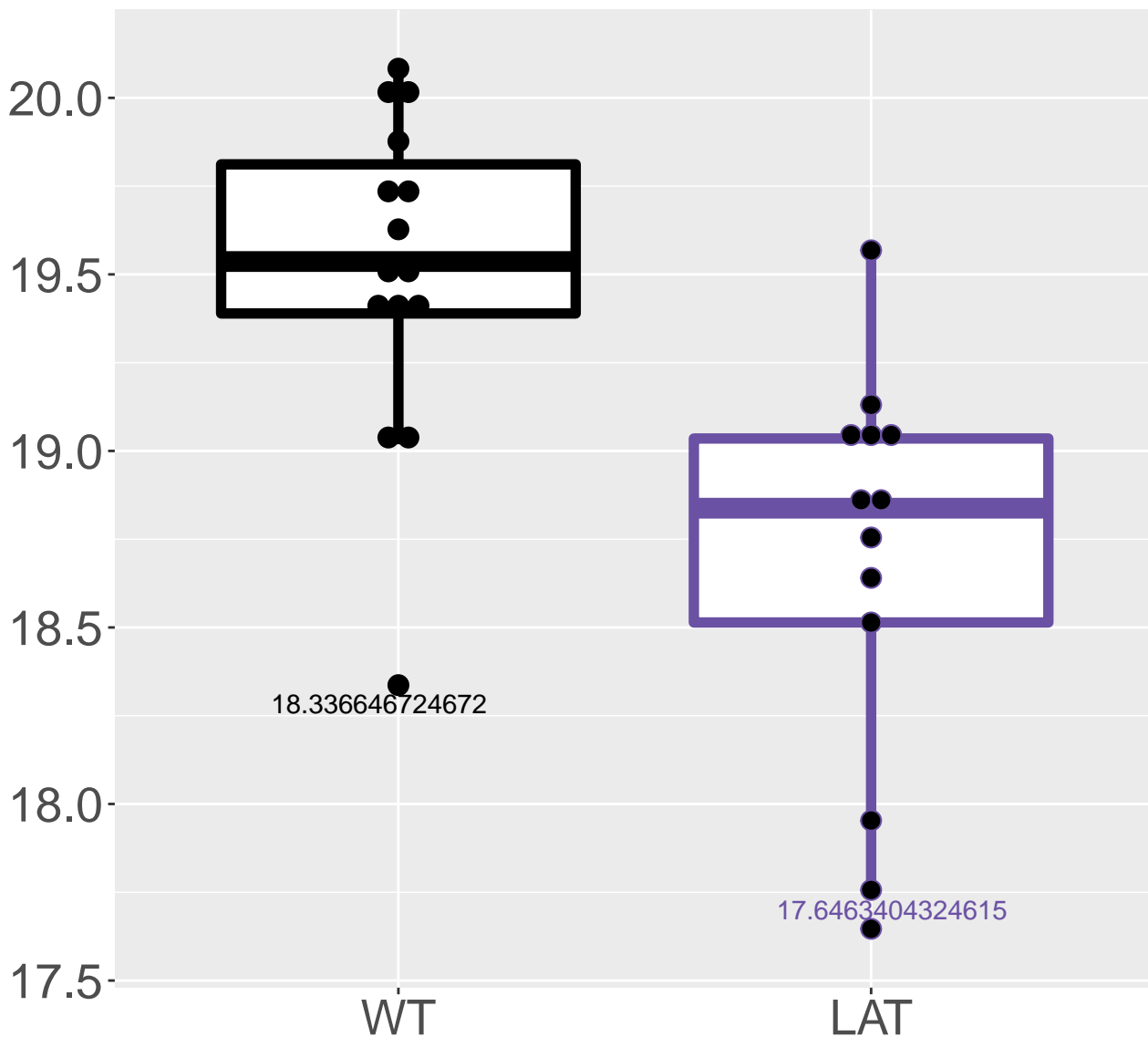


**FDR = 0.0016, FC = -0.86**



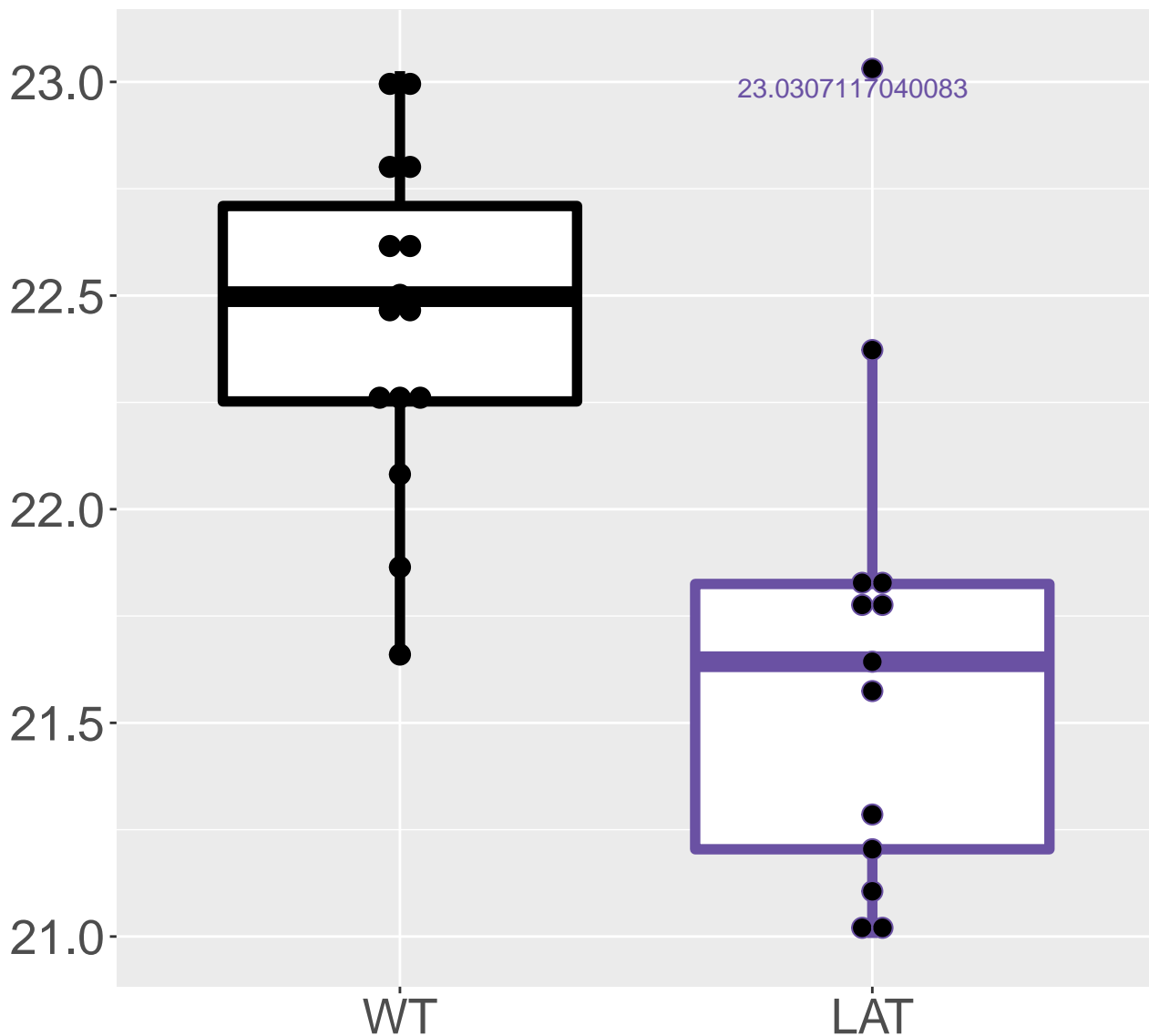
**M586.4928T77.55**

**FDR = 0.0016, FC = -0.84**

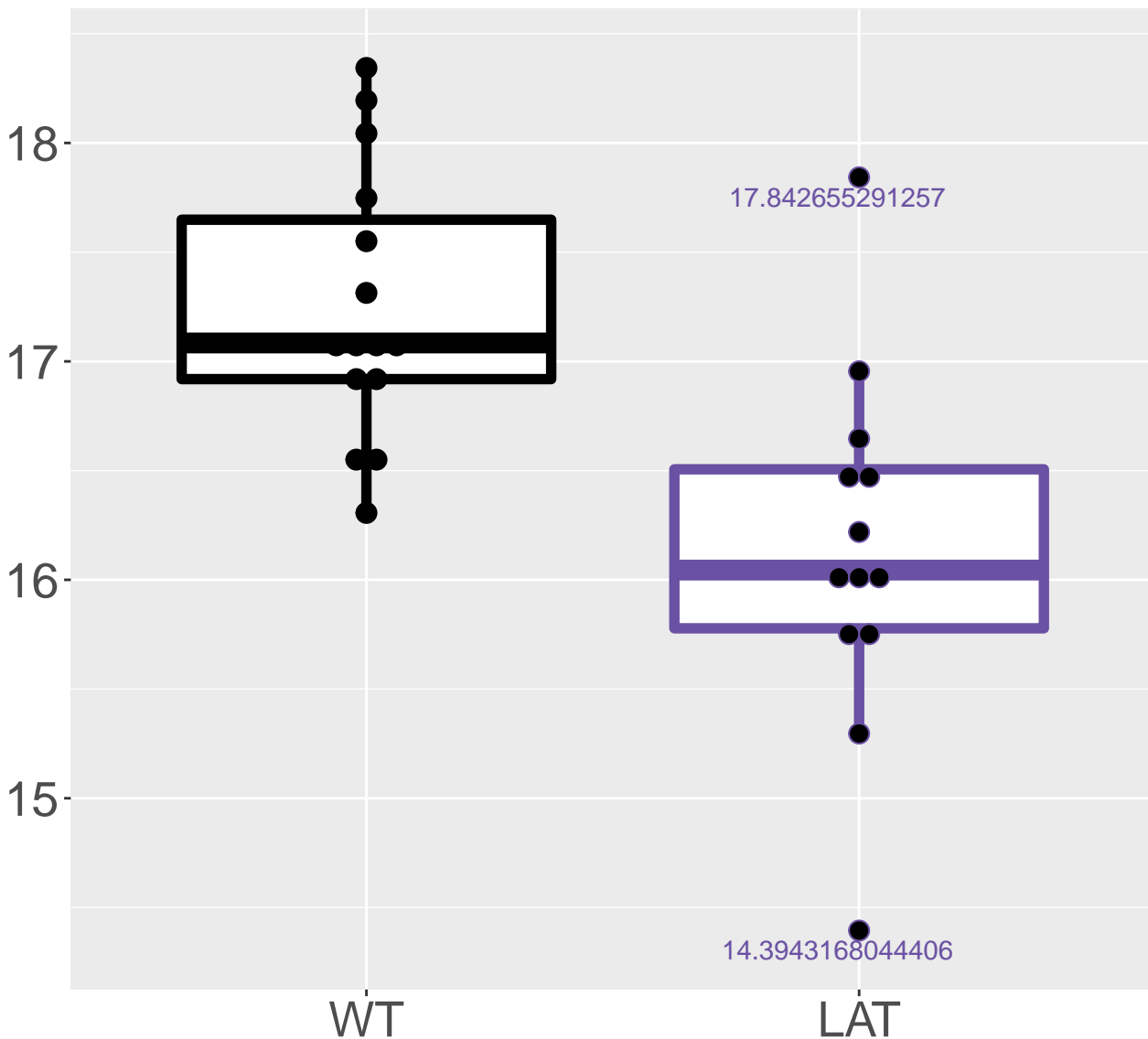


**M332.1043T607.45**

**FDR = 0.0016, FC = -0.79**

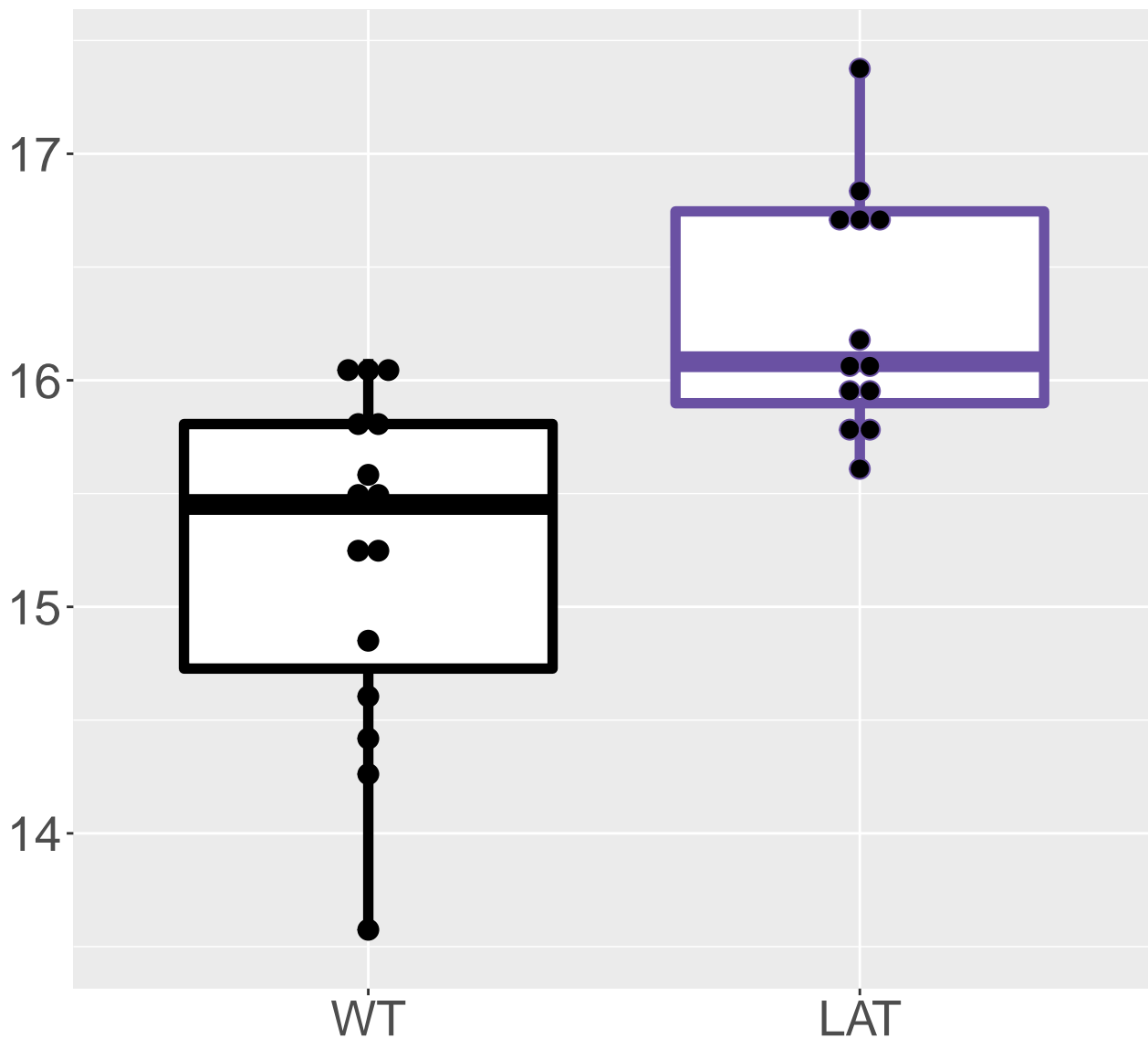


**M325.1258T173.01**  
**FDR = 0.0016, FC = -1.1**



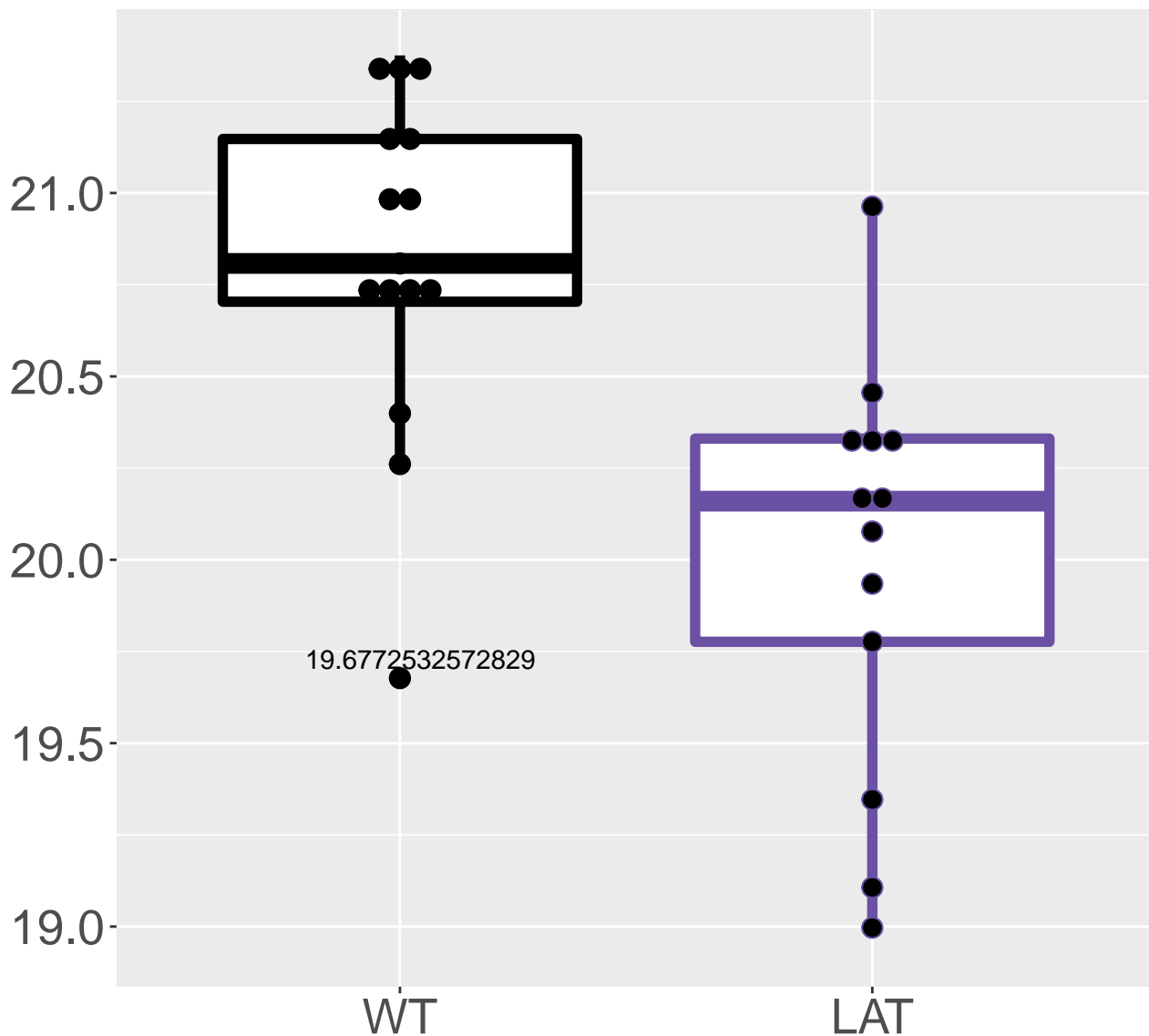


**M372.9853T598.64**  
**FDR = 0.0016, FC = 1.1**



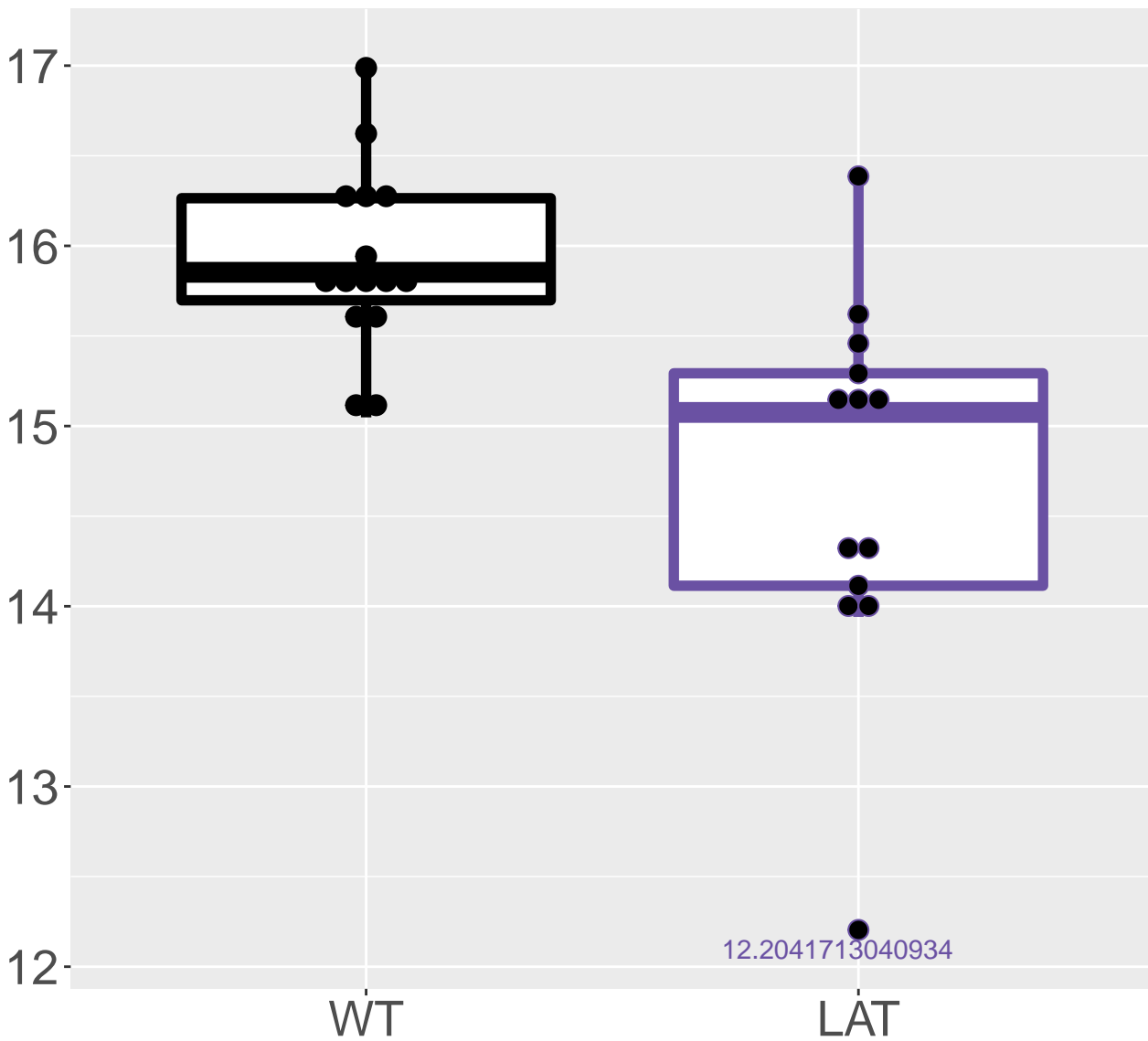
**M585.4895T77.49**

**FDR = 0.0016, FC = -0.83**



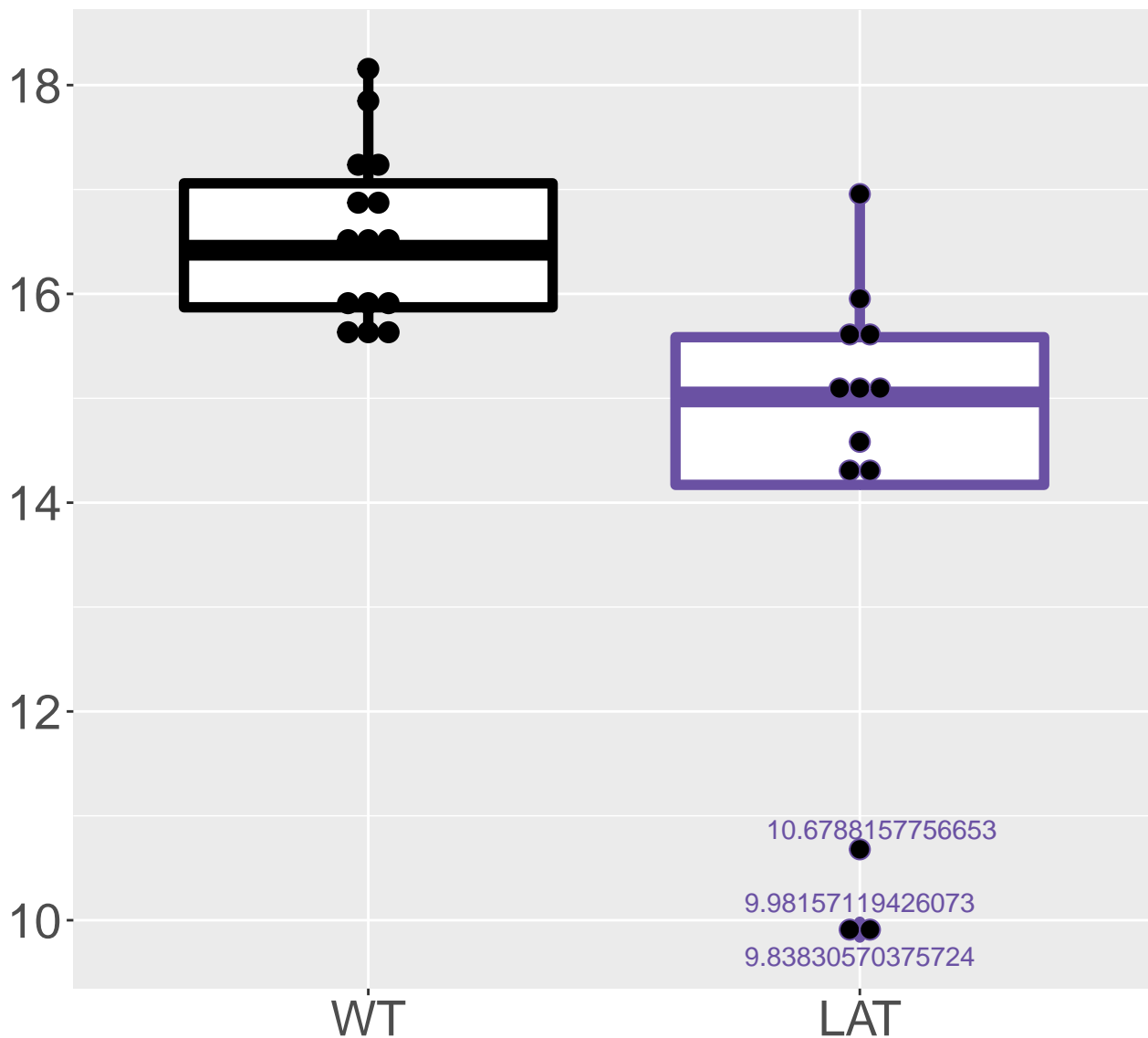
**M880.1824T544.37**

**FDR = 0.0017, FC = -1.2**



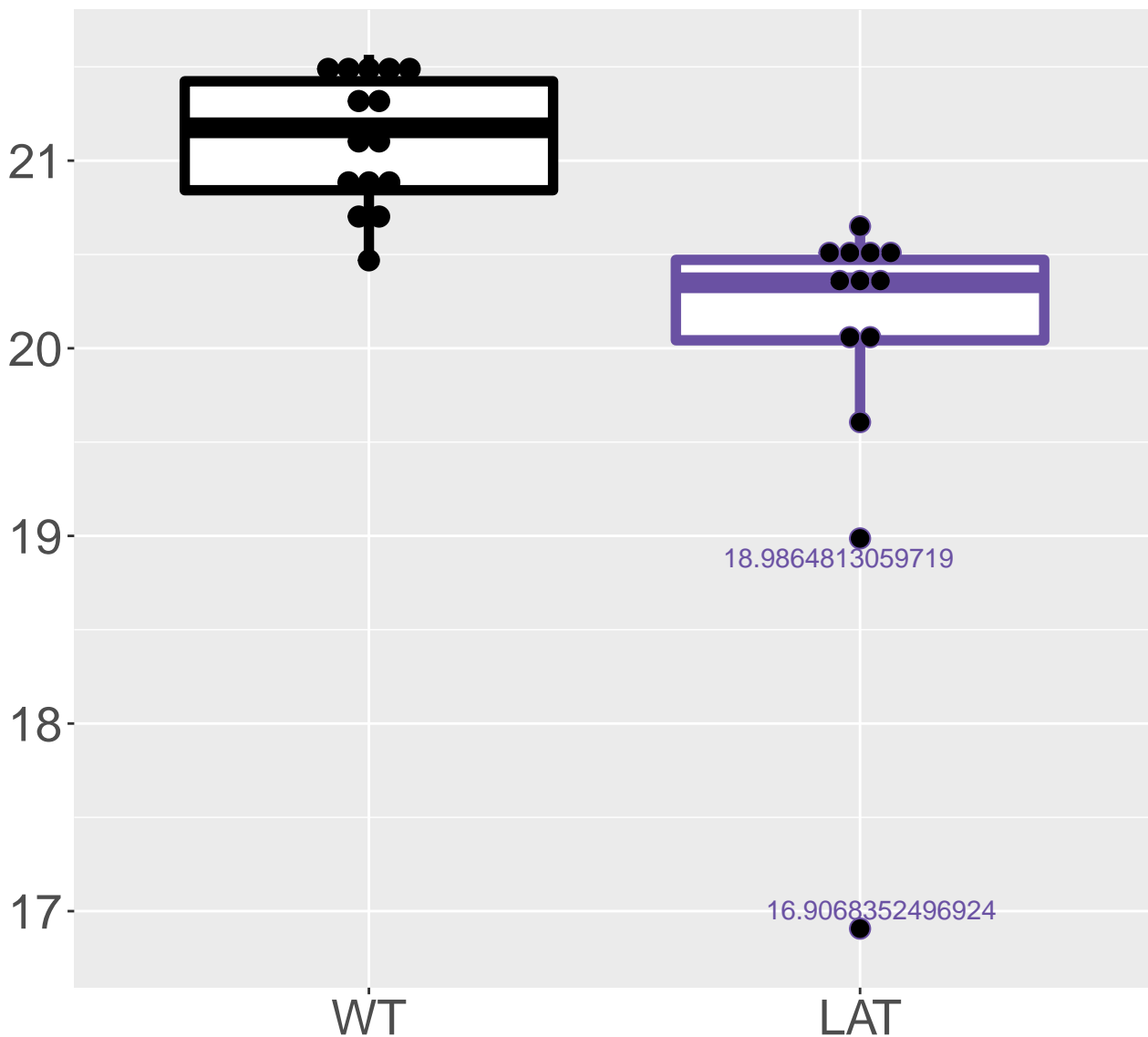
**M255.0759T378.54**

**FDR = 0.0017, FC = -2.5**



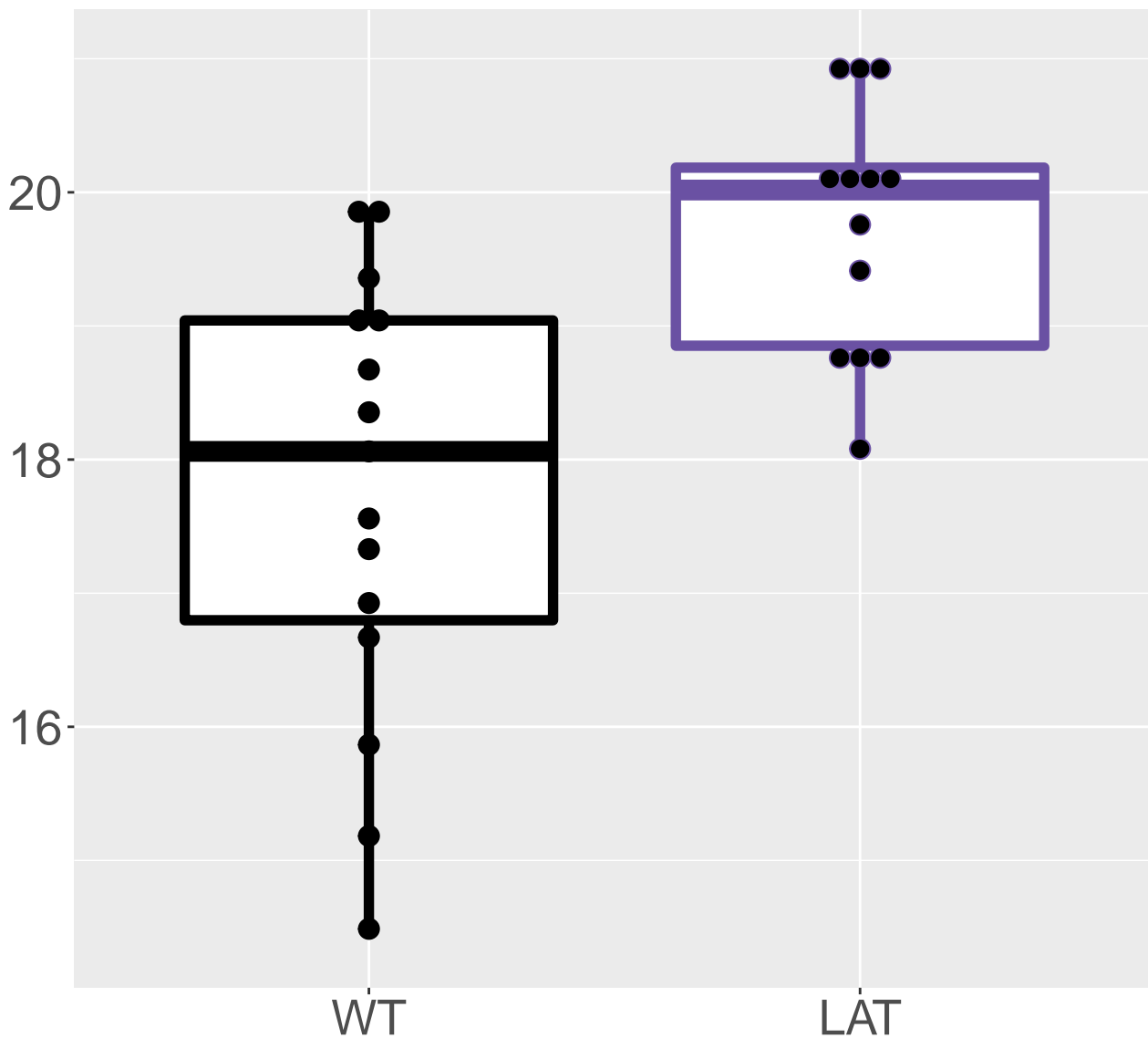
**M392.1136T239.16**

**FDR = 0.0017, FC = -1.2**

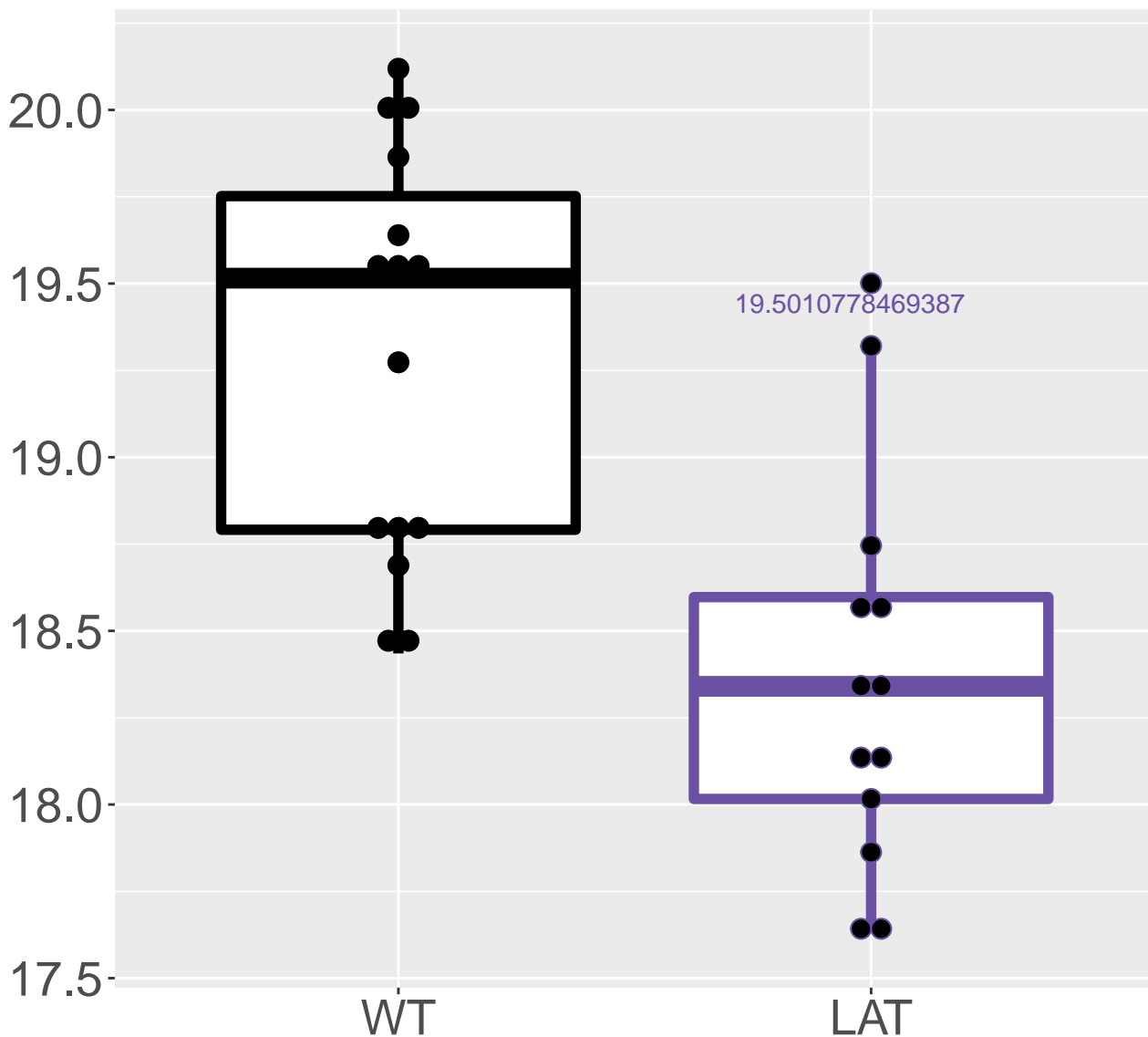


**M571.1286T529.39**

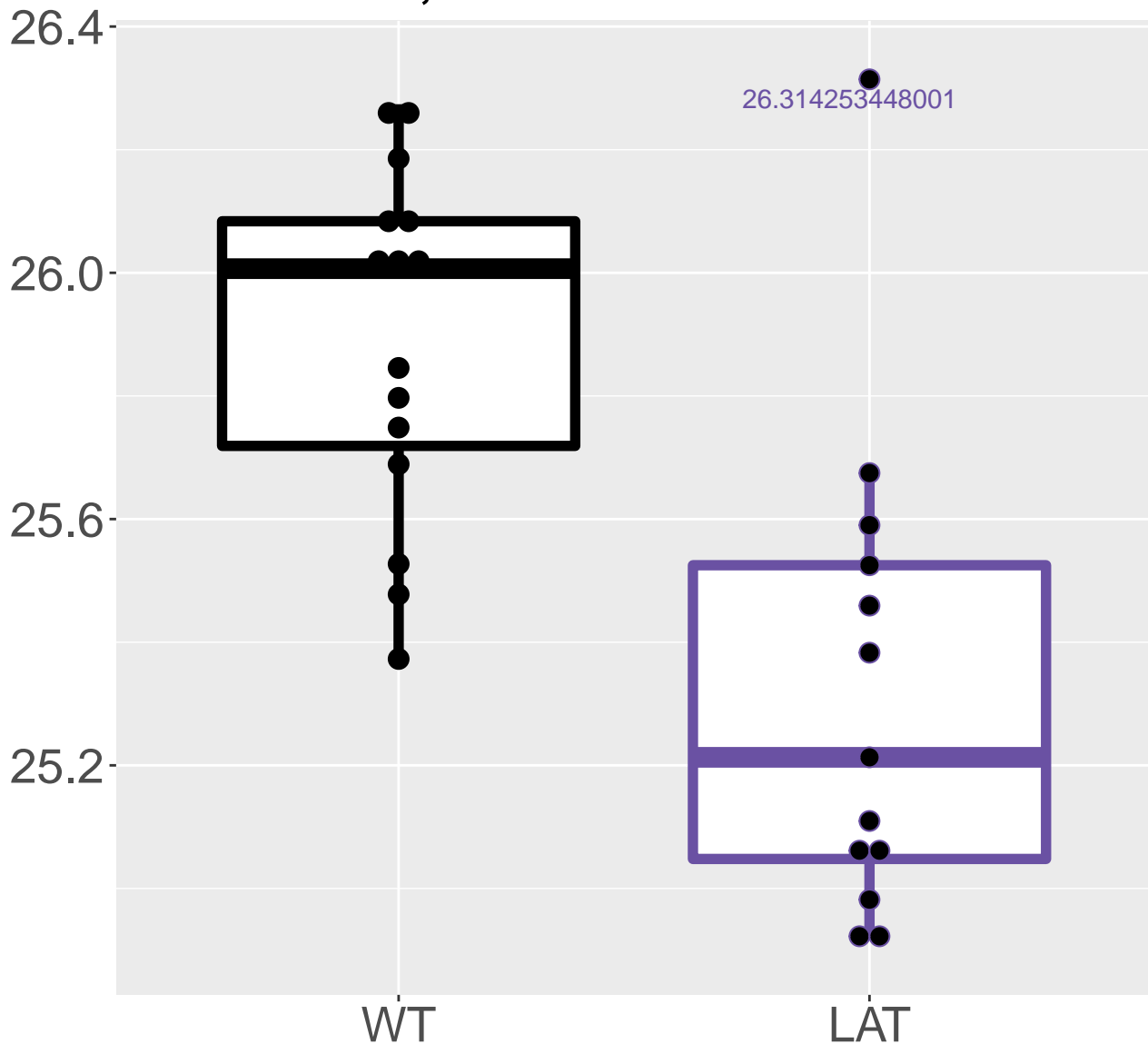
**FDR = 0.0017, FC = 2**



**M304.5798T573.58\_1**  
**FDR = 0.0017, FC = -0.93**



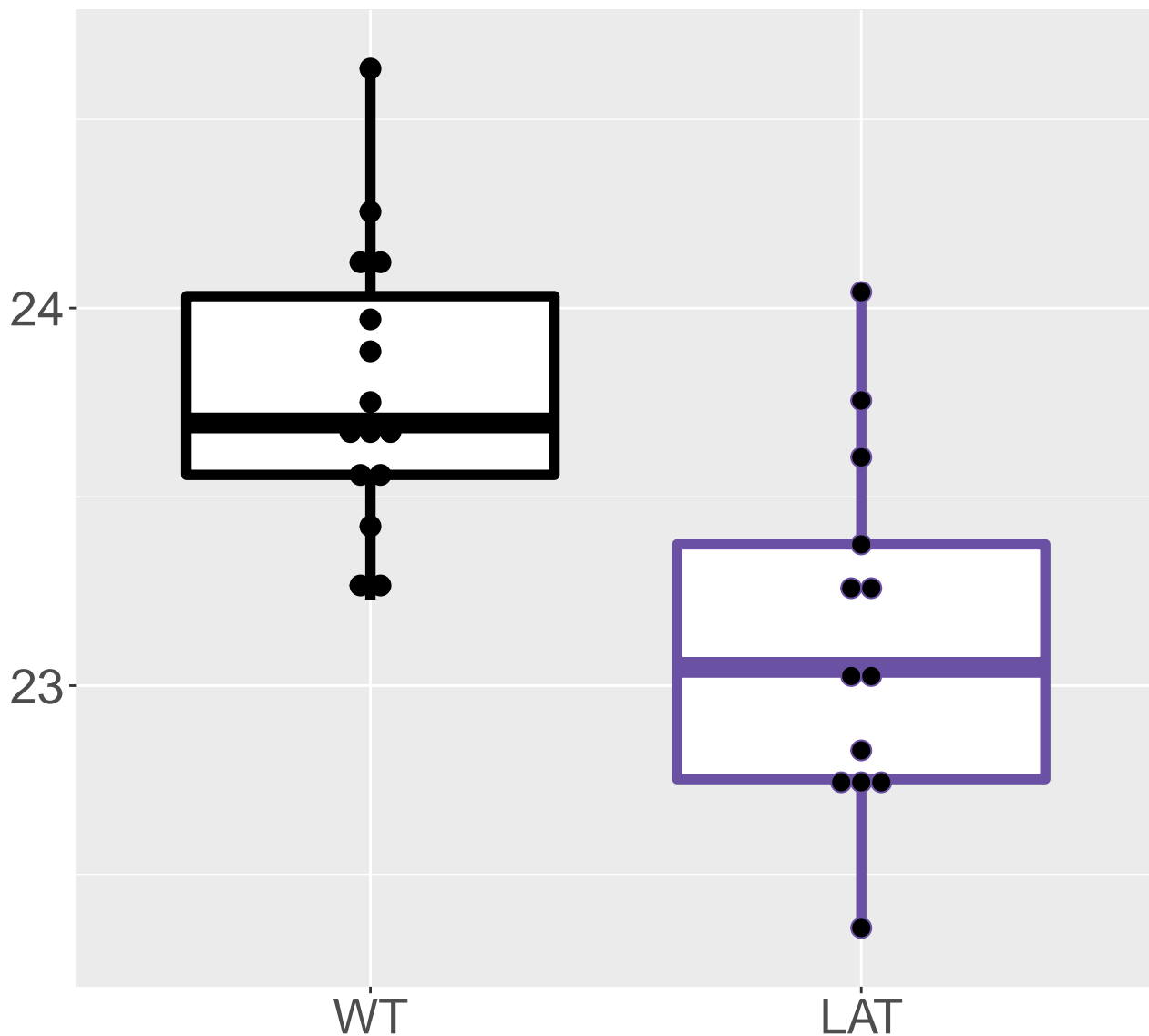
**Maltotetraose|Stachyose**  
**FDR = 0.0017, FC = -0.57**





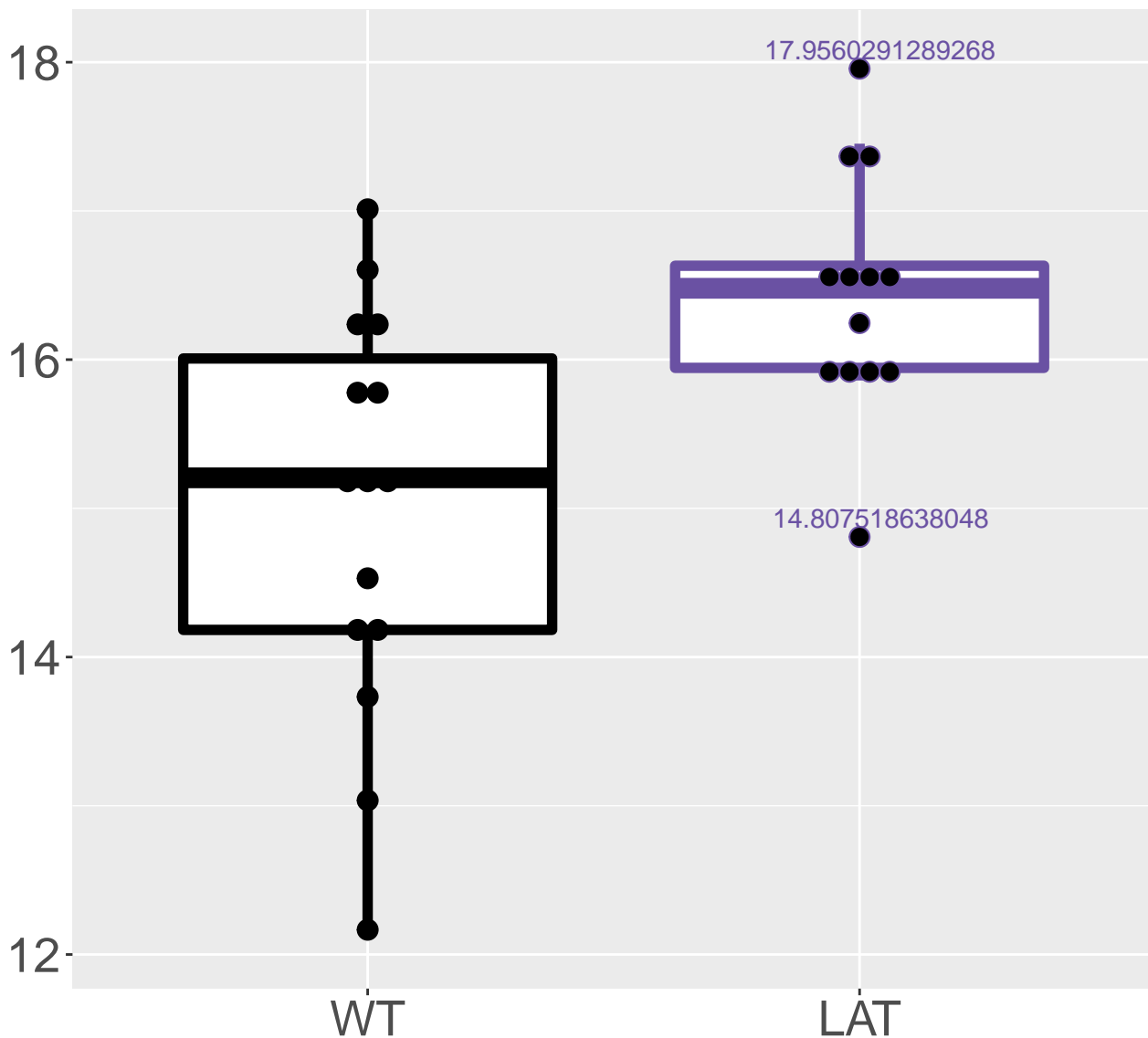
**M439.0866T544.56**

**FDR = 0.0017, FC = -0.65**



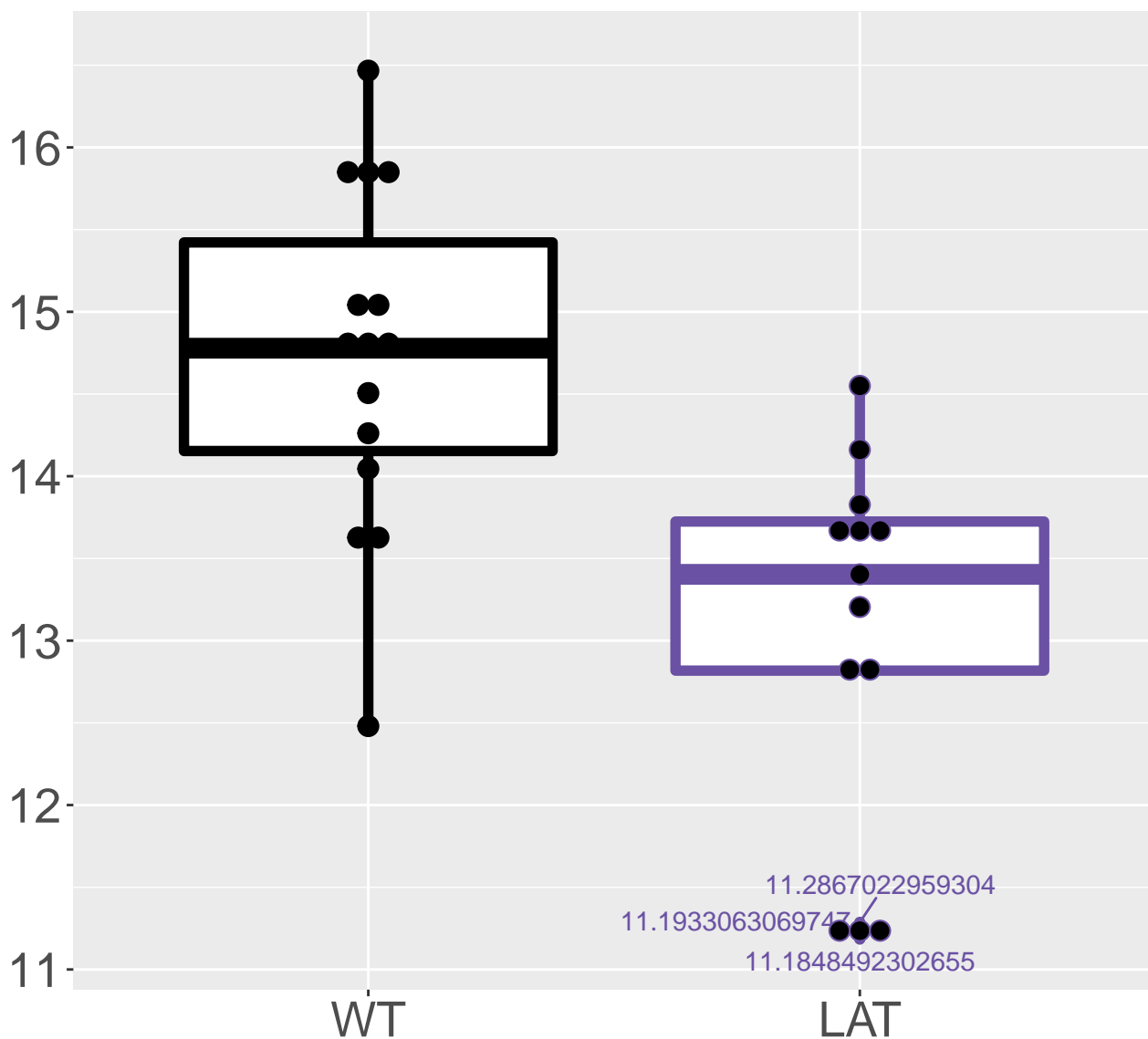
**M407.0995T382.21**

**FDR = 0.0018, FC = 1.4, sex\*\***



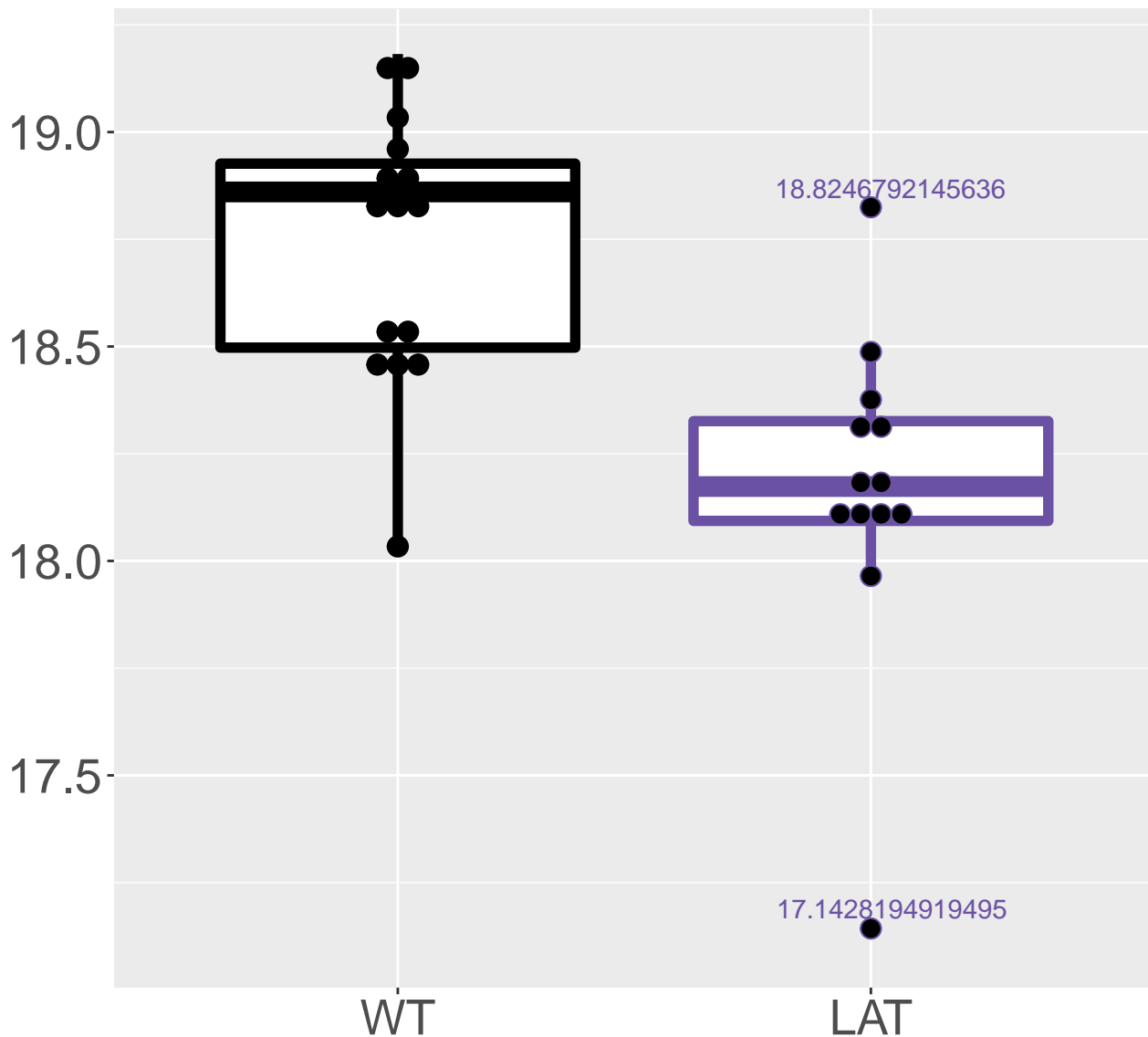
**M476.1893T174.34**

**FDR = 0.0018, FC = -1.7**



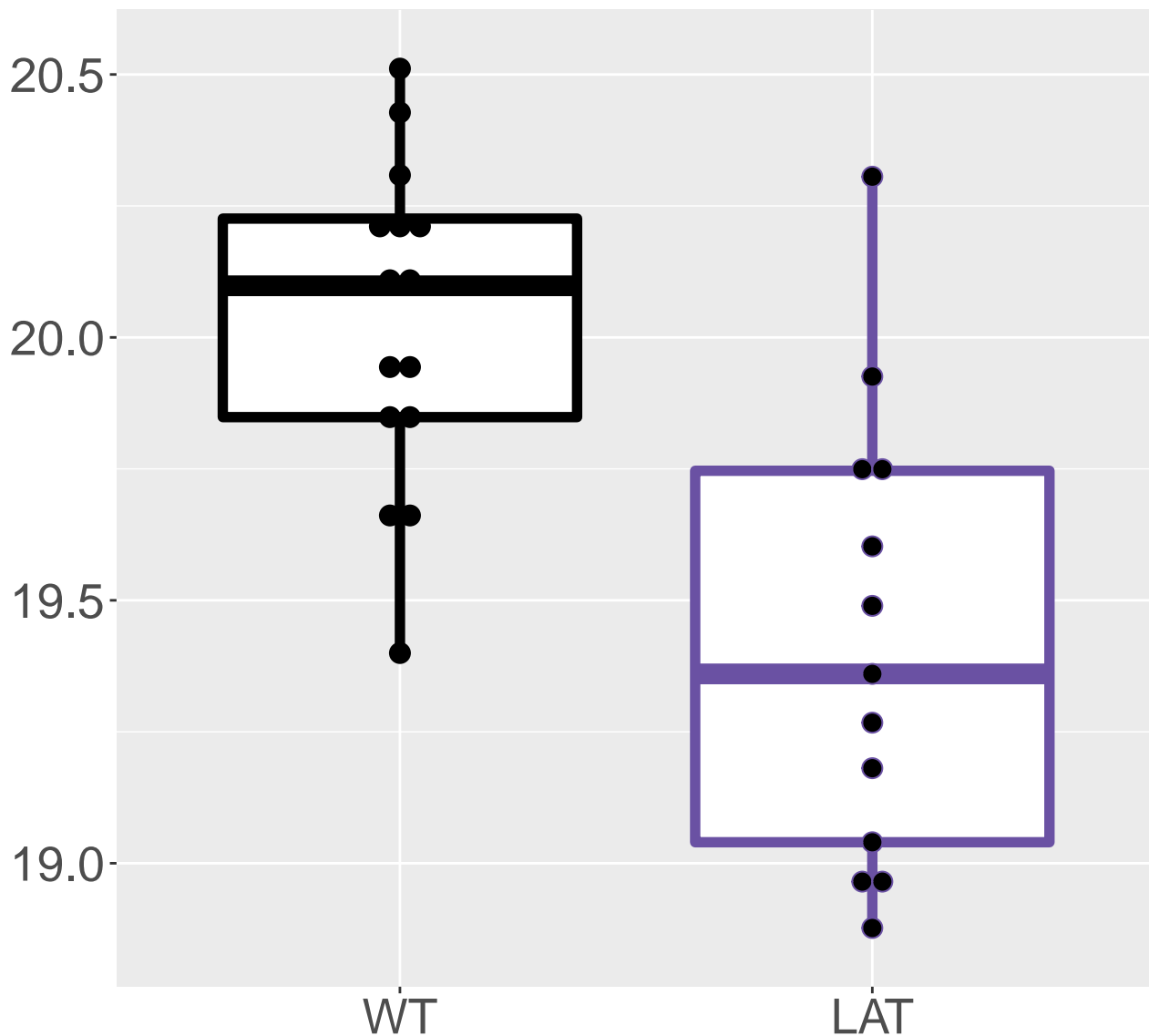
**M203.0676T325.42**

**FDR = 0.0018, FC = -0.57**

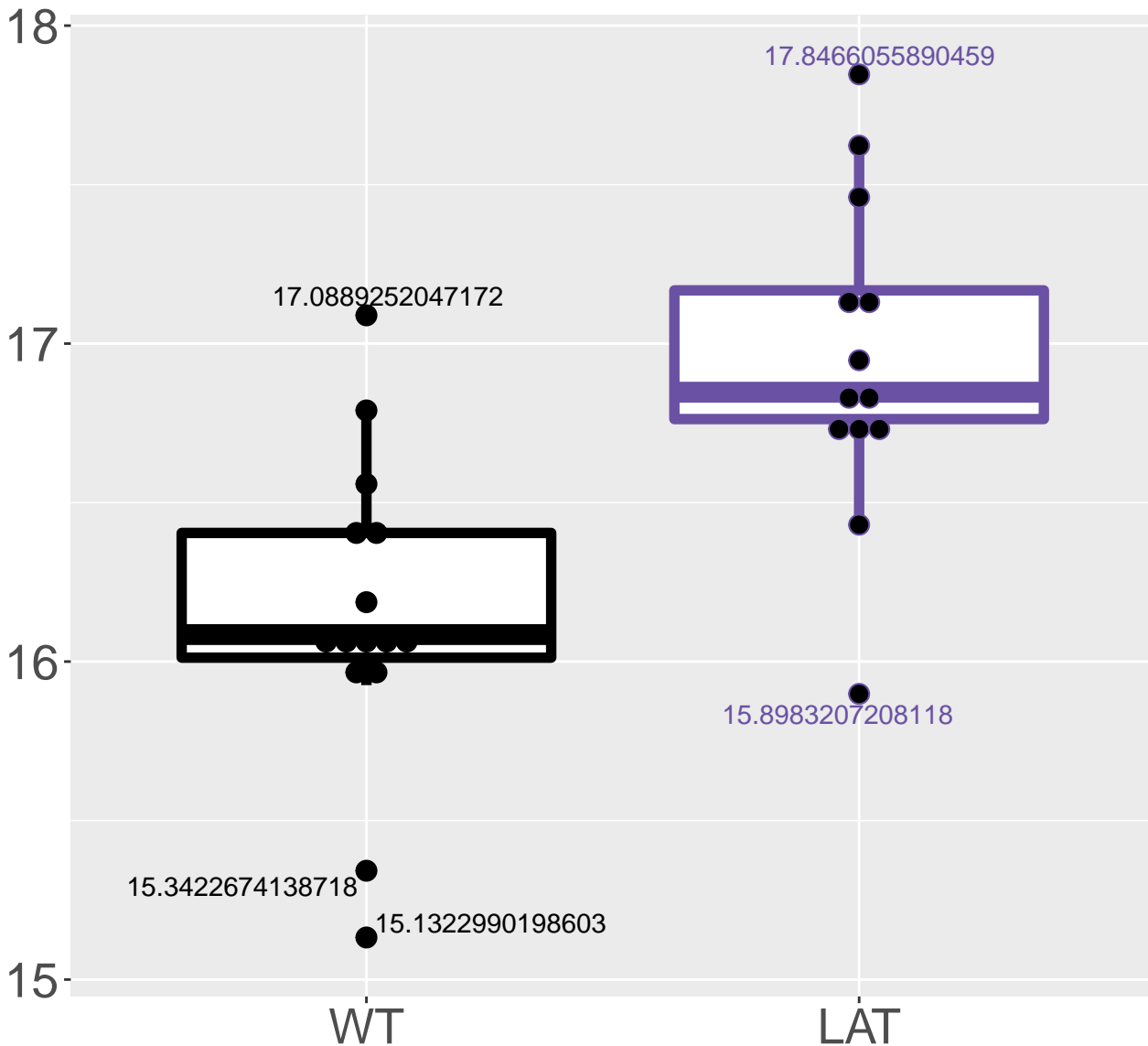


**M971.7916T603.03\_1**

**FDR = 0.0018, FC = -0.61**

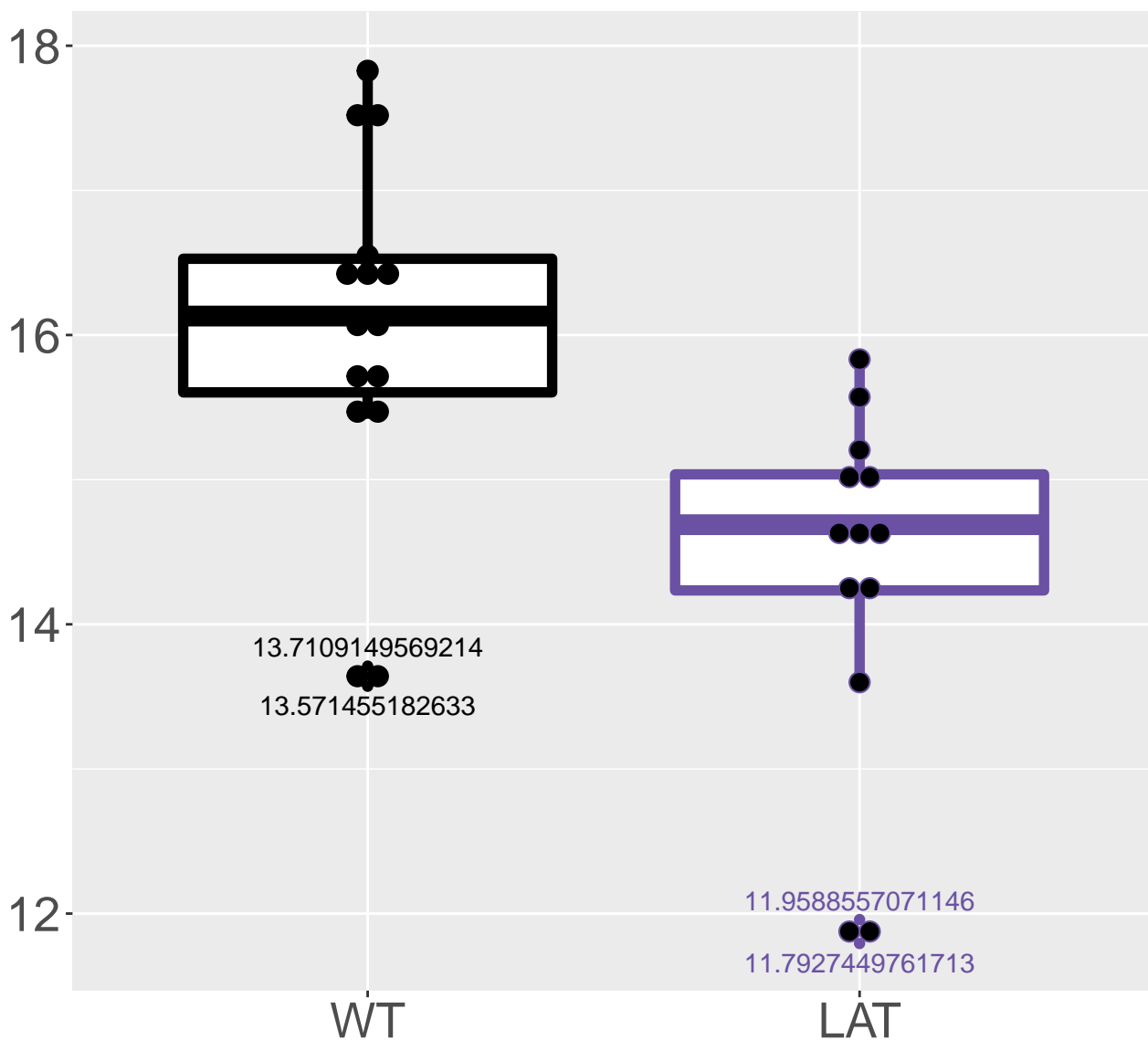


**FDR = 0.0019, FC = 0.81**



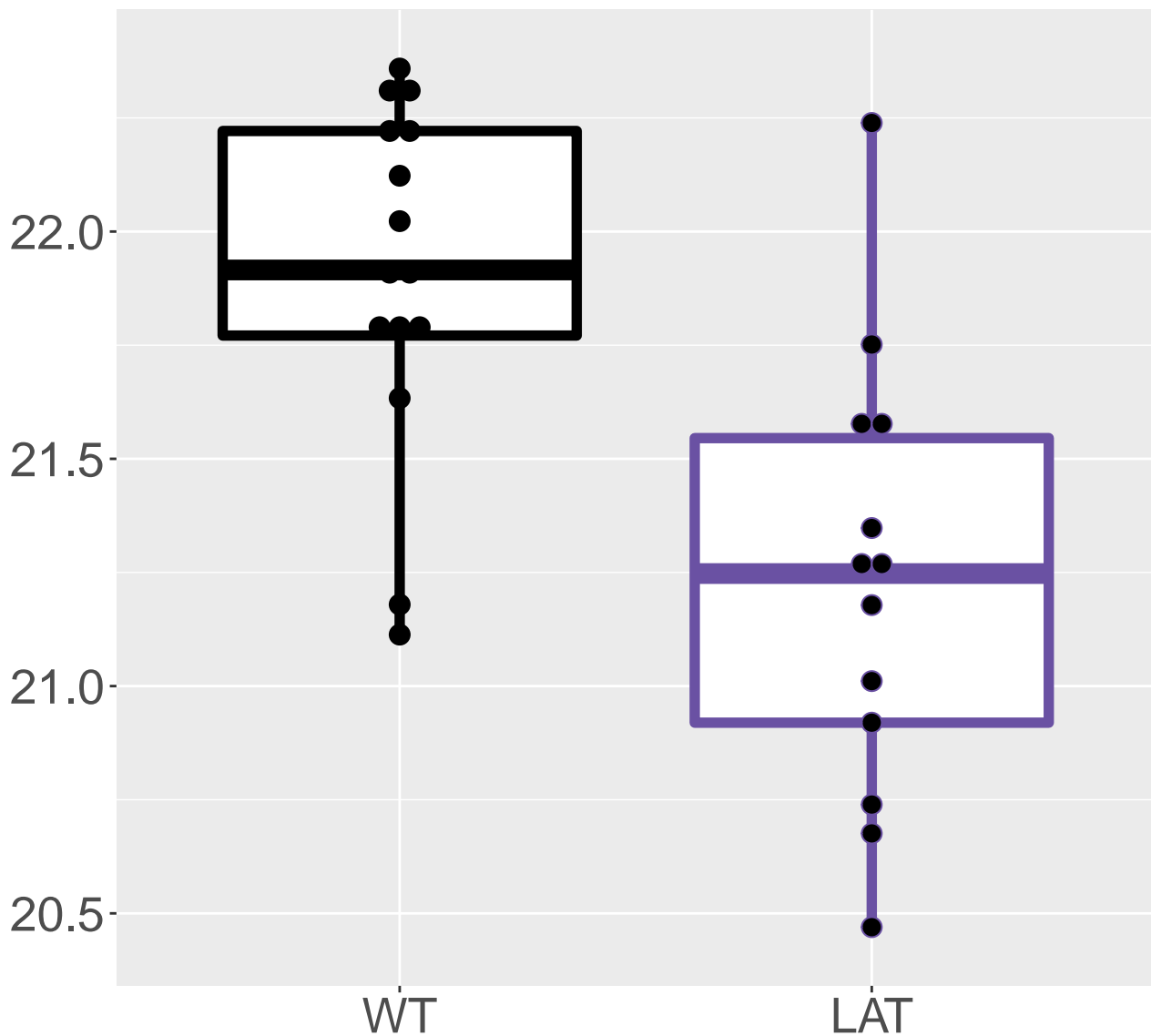
**M293.0551T170.43**

**FDR = 0.0019, FC = -1.7, sex\***



**M281.0882T537.14**

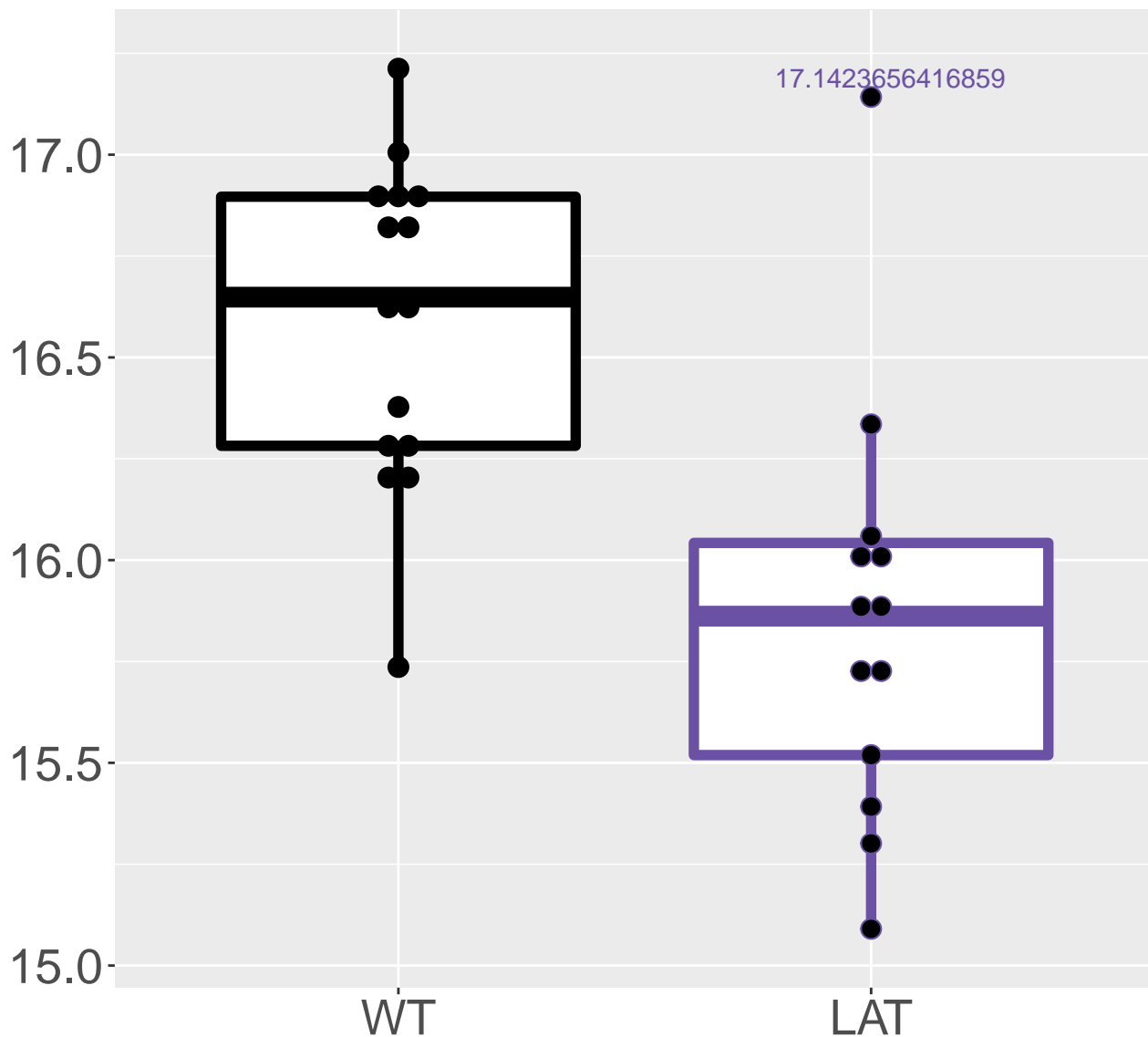
**FDR = 0.0019, FC = -0.68**



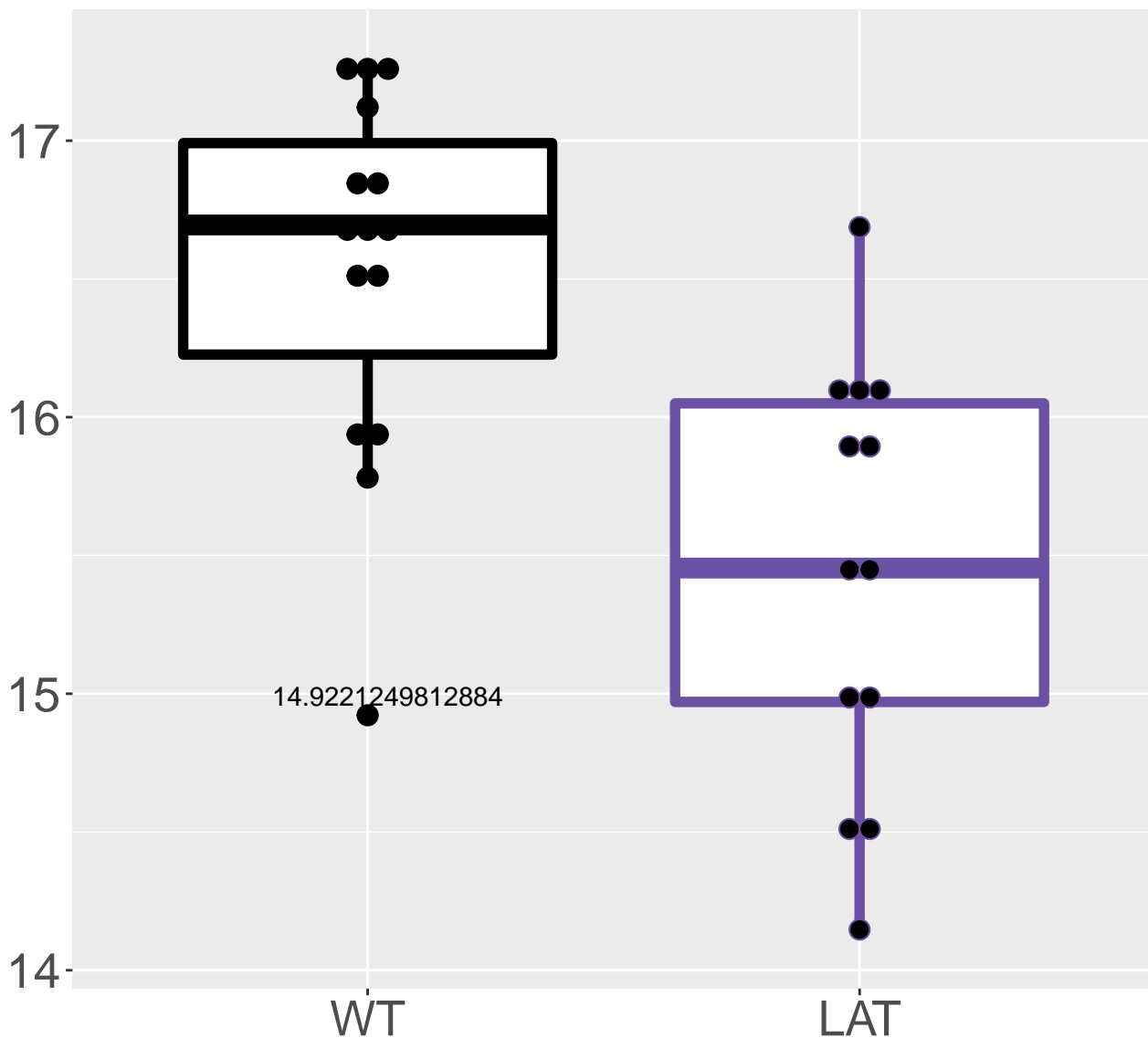


**M669.2269T607.83**

**FDR = 0.0019, FC = -0.74**

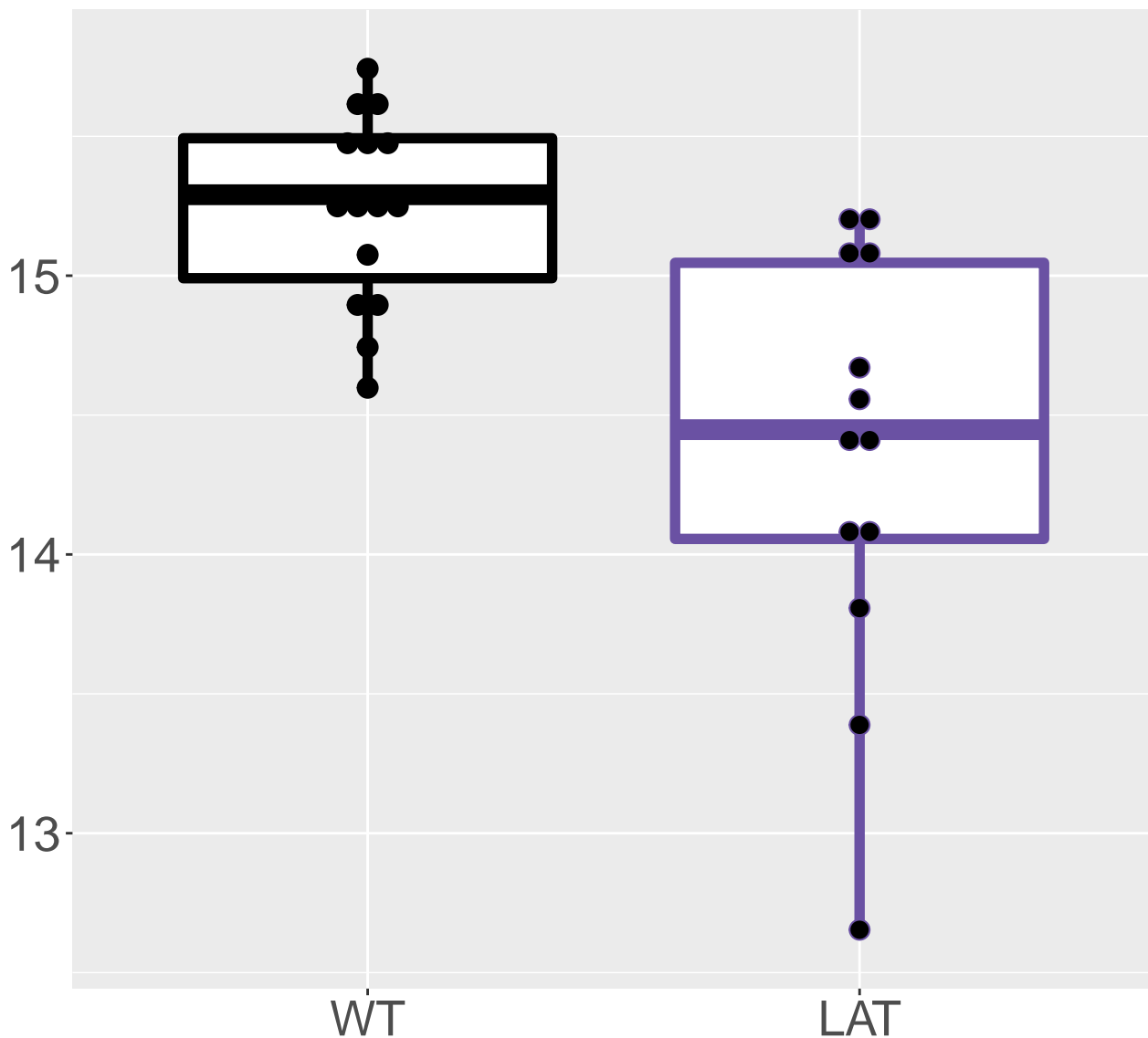


**M409.1834T206.15**  
**FDR = 0.0019, FC = -1.1**



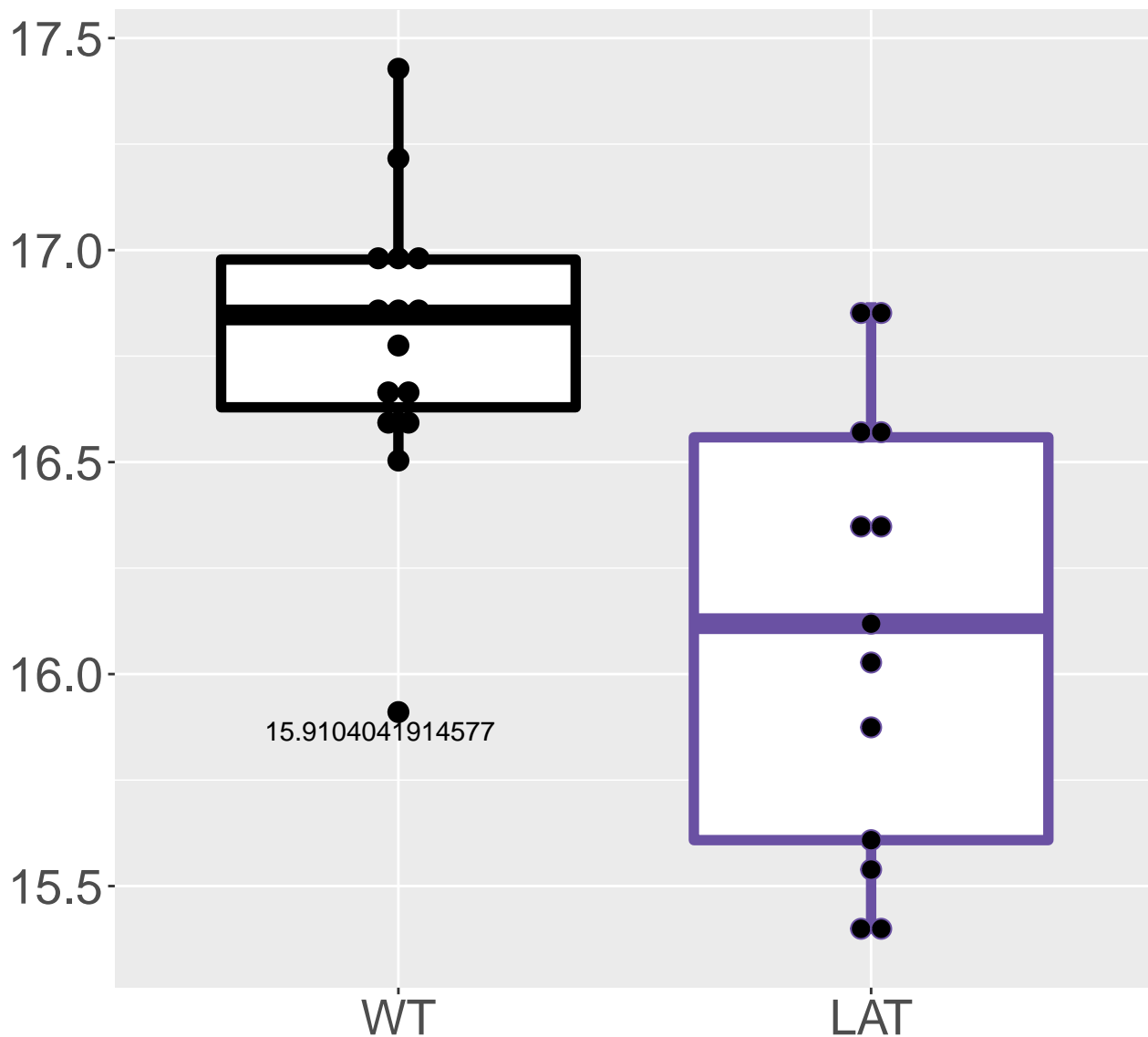
**M661.4116T86.11**

**FDR = 0.0019, FC = -0.89**



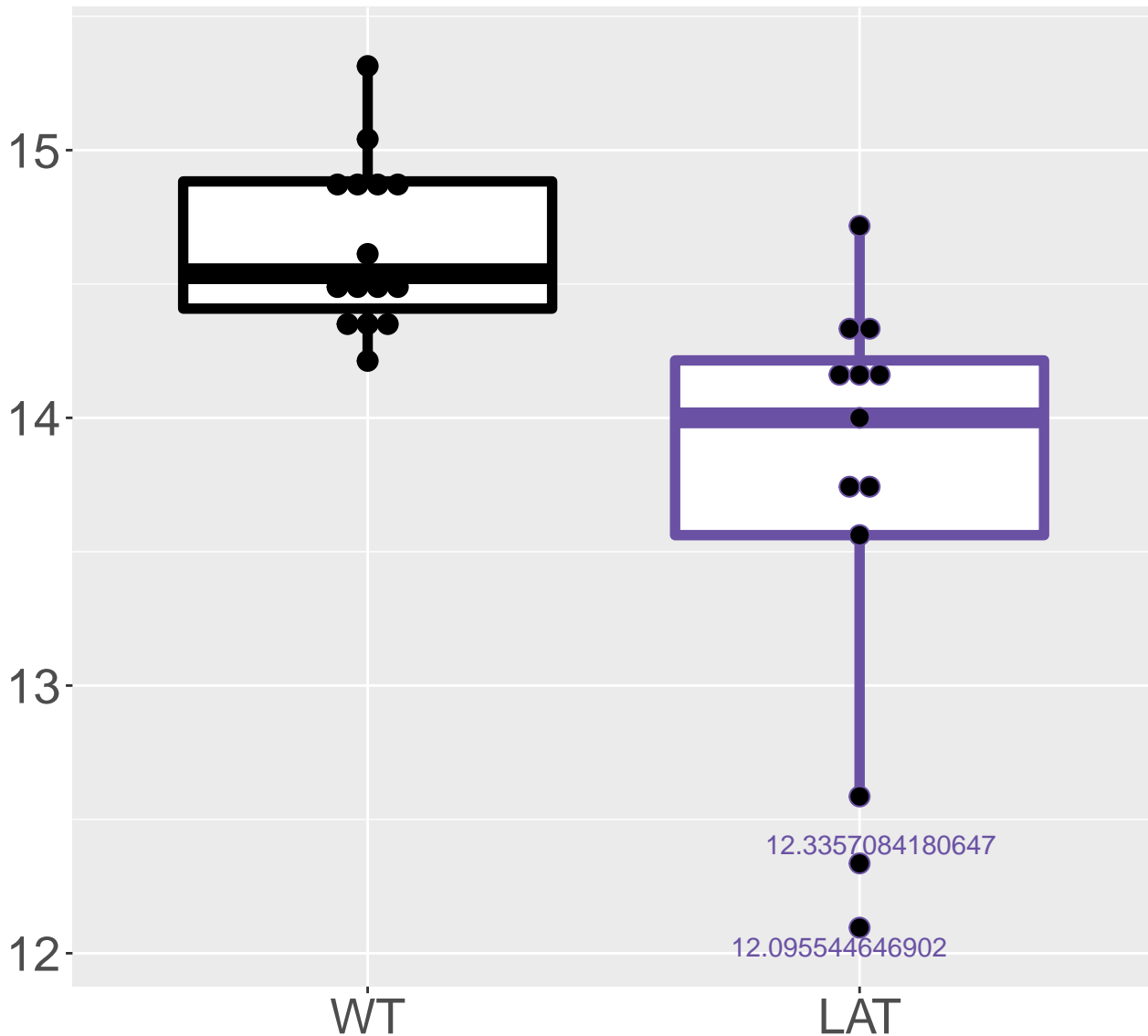
**M391.1131T555.93**

**FDR = 0.0019, FC = -0.68**



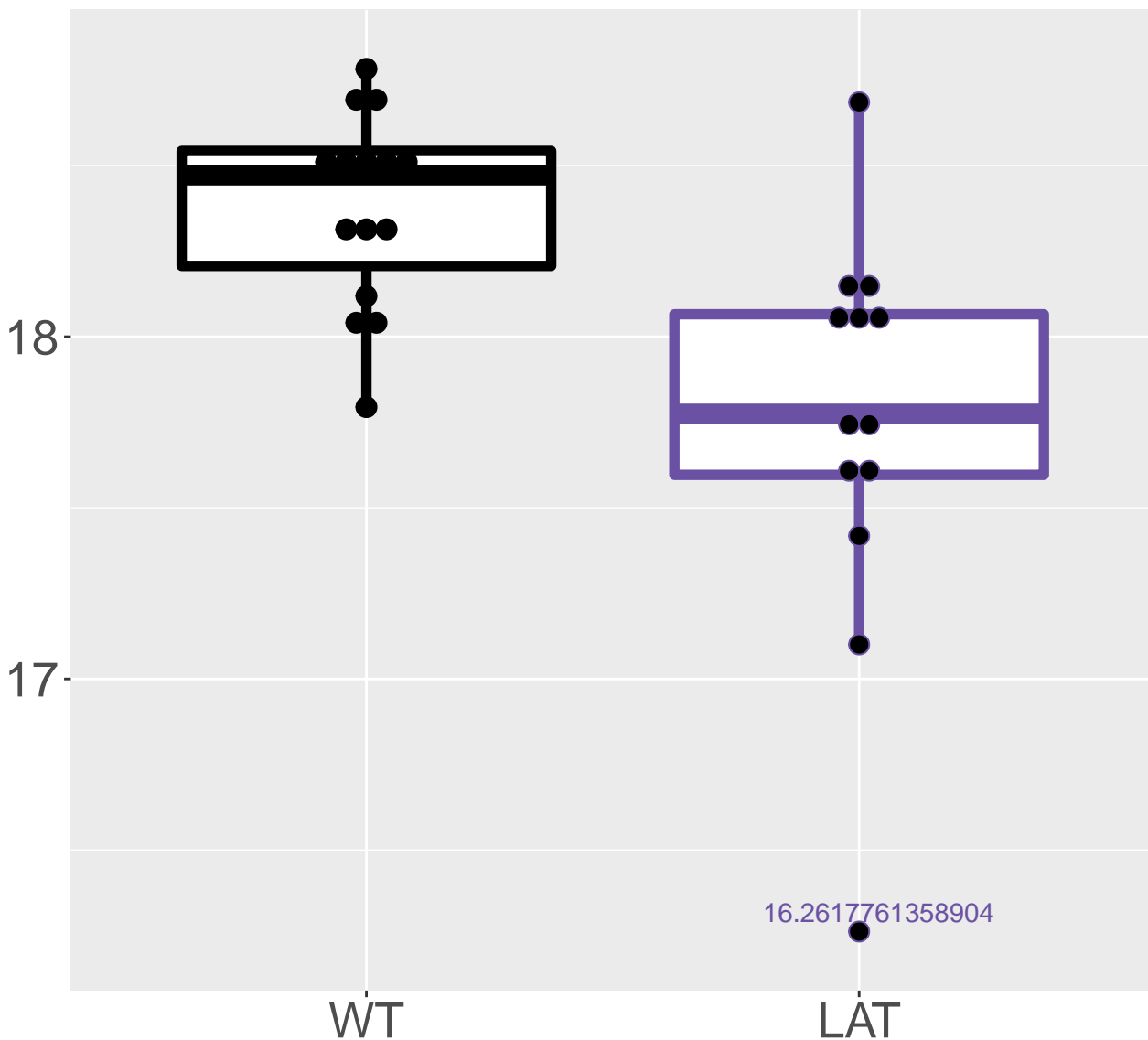
**M853.7248T568.64**

**FDR = 0.0019, FC = -0.96**

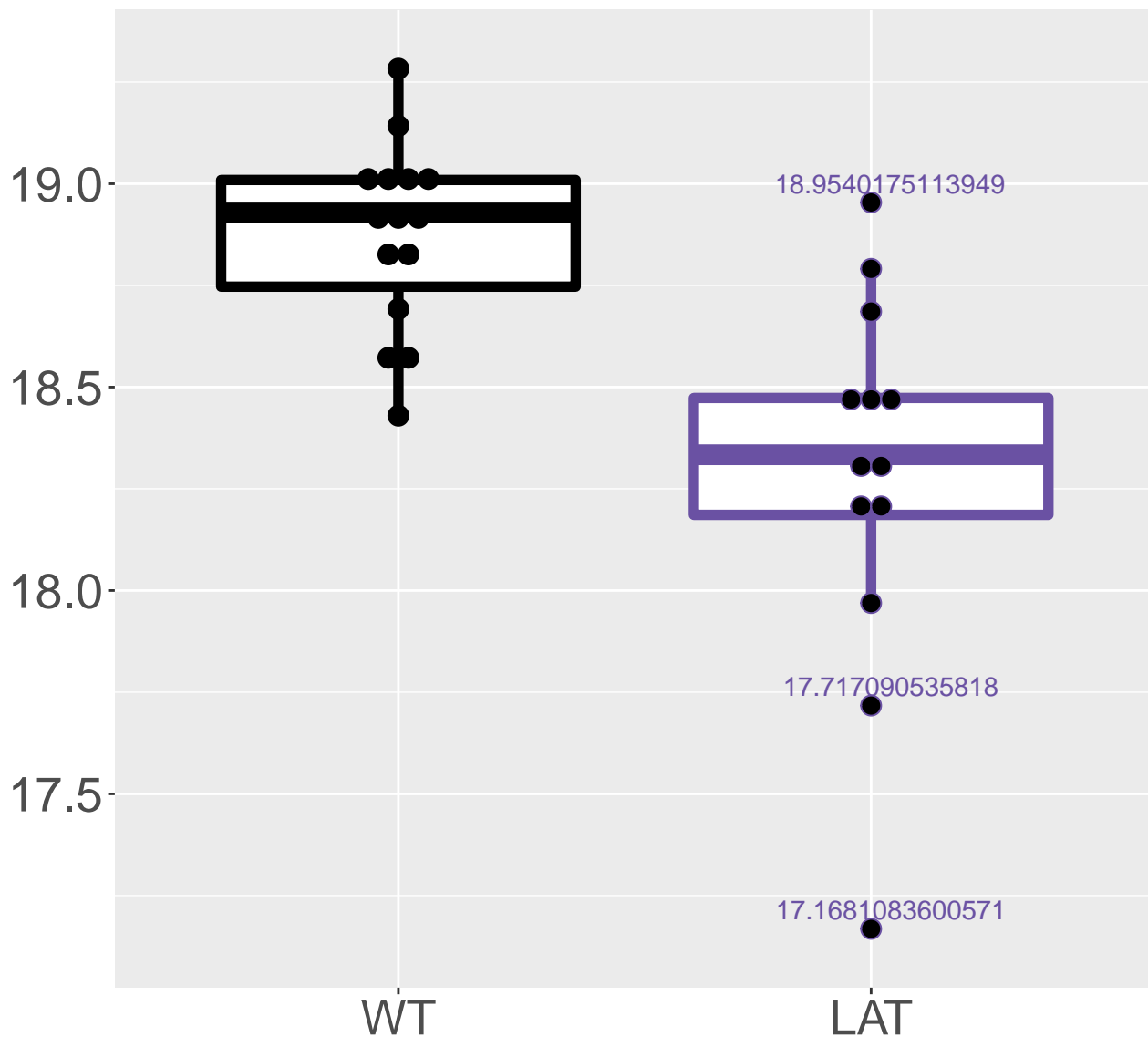


**M432.1368T495.79**

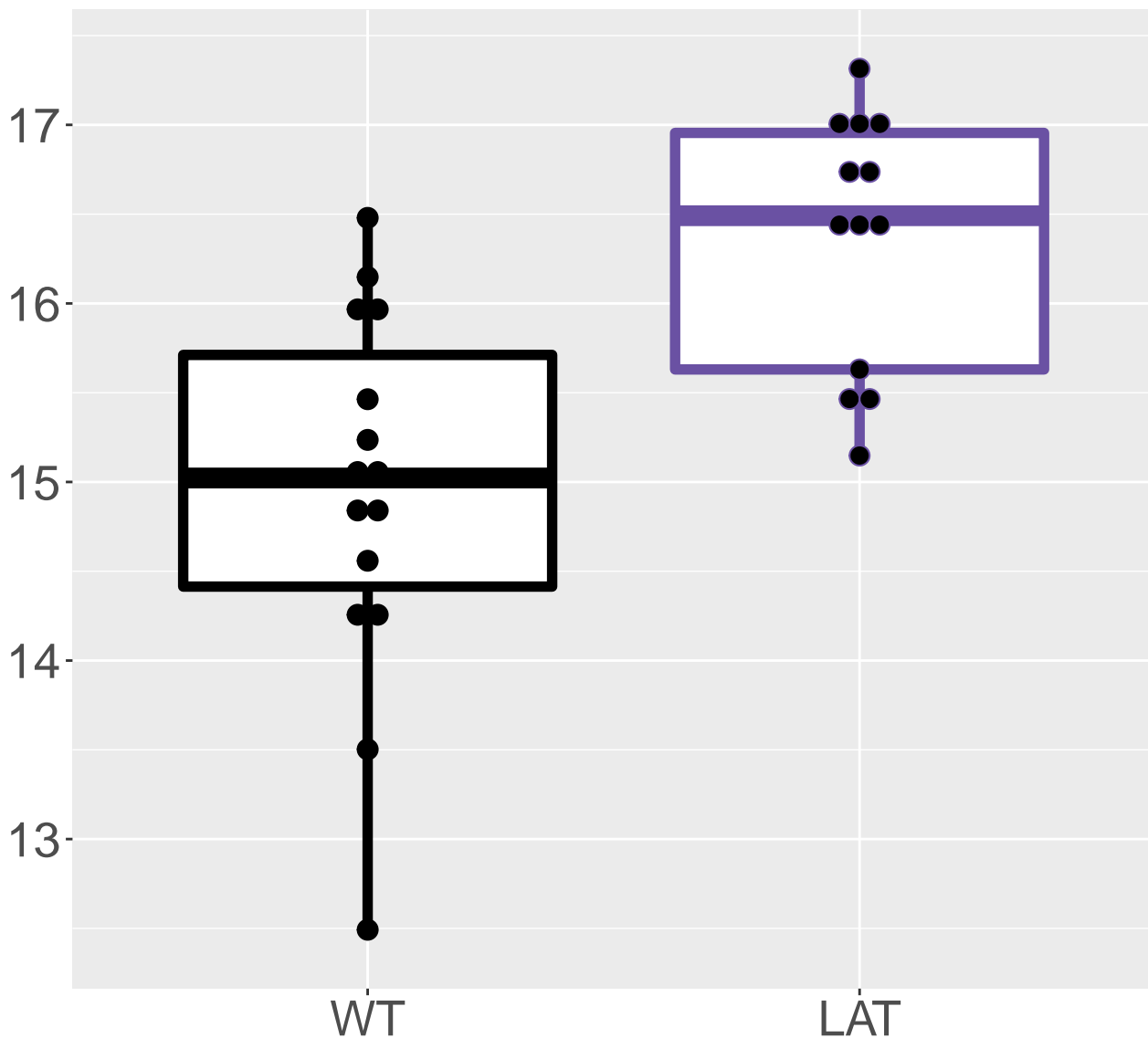
**FDR = 0.002, FC = -0.63**



**M132.0915T217.23**  
**FDR = 0.002, FC = -0.59**



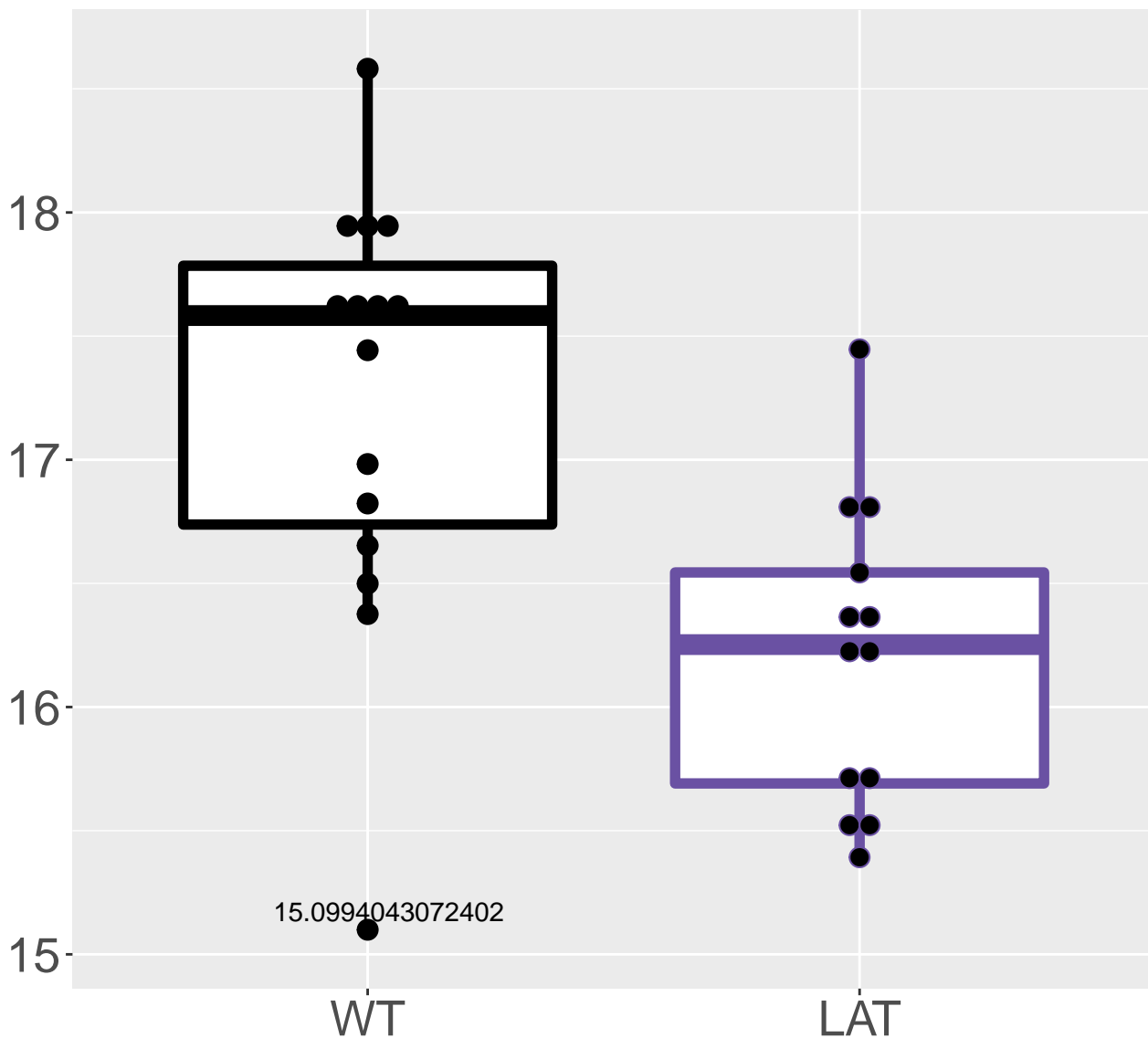
**M536.5862T589.31**  
**FDR = 0.002, FC = 1.4**





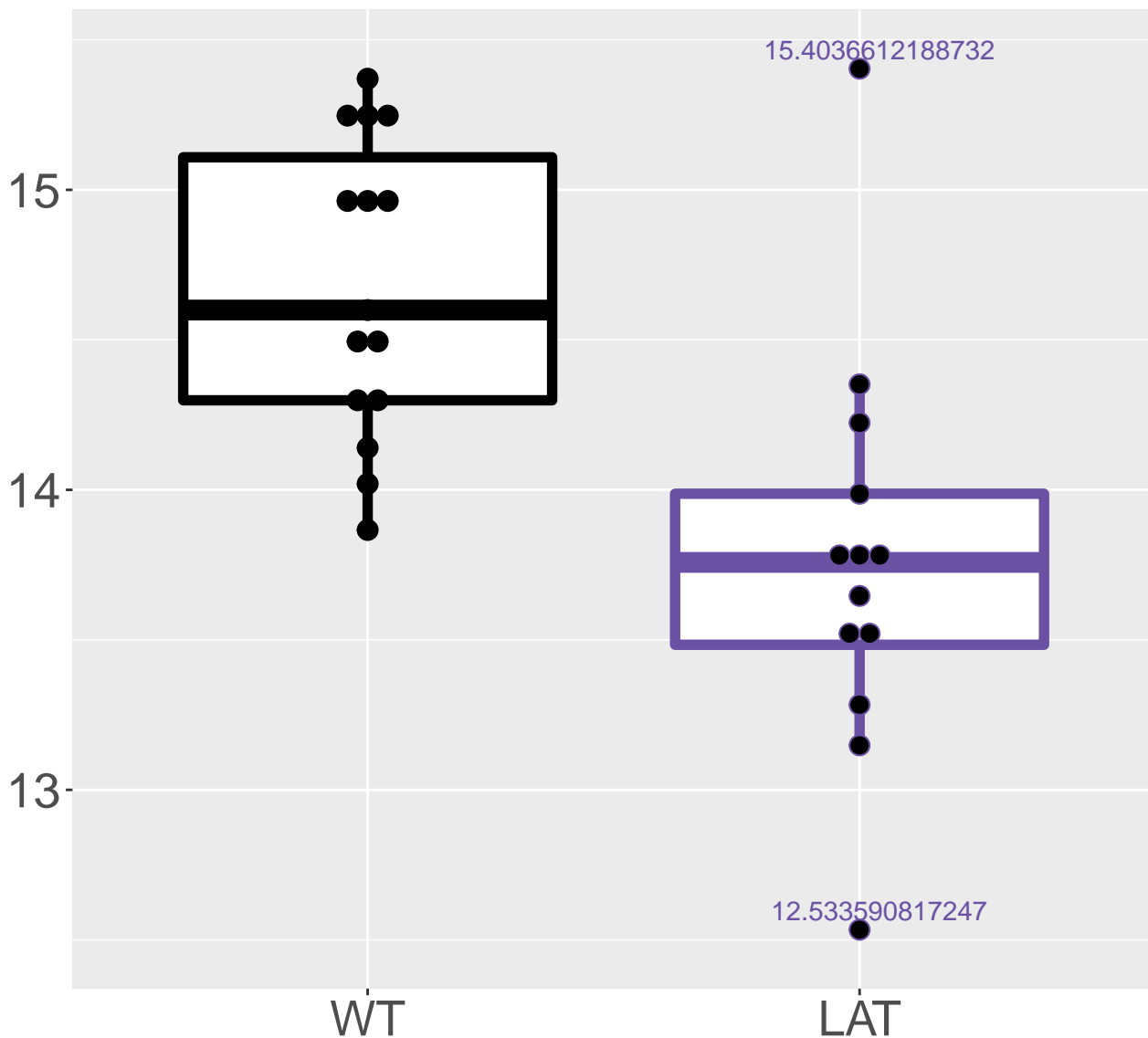
**M498.1888T327.9**

**FDR = 0.002, FC = -1.1, sex\***



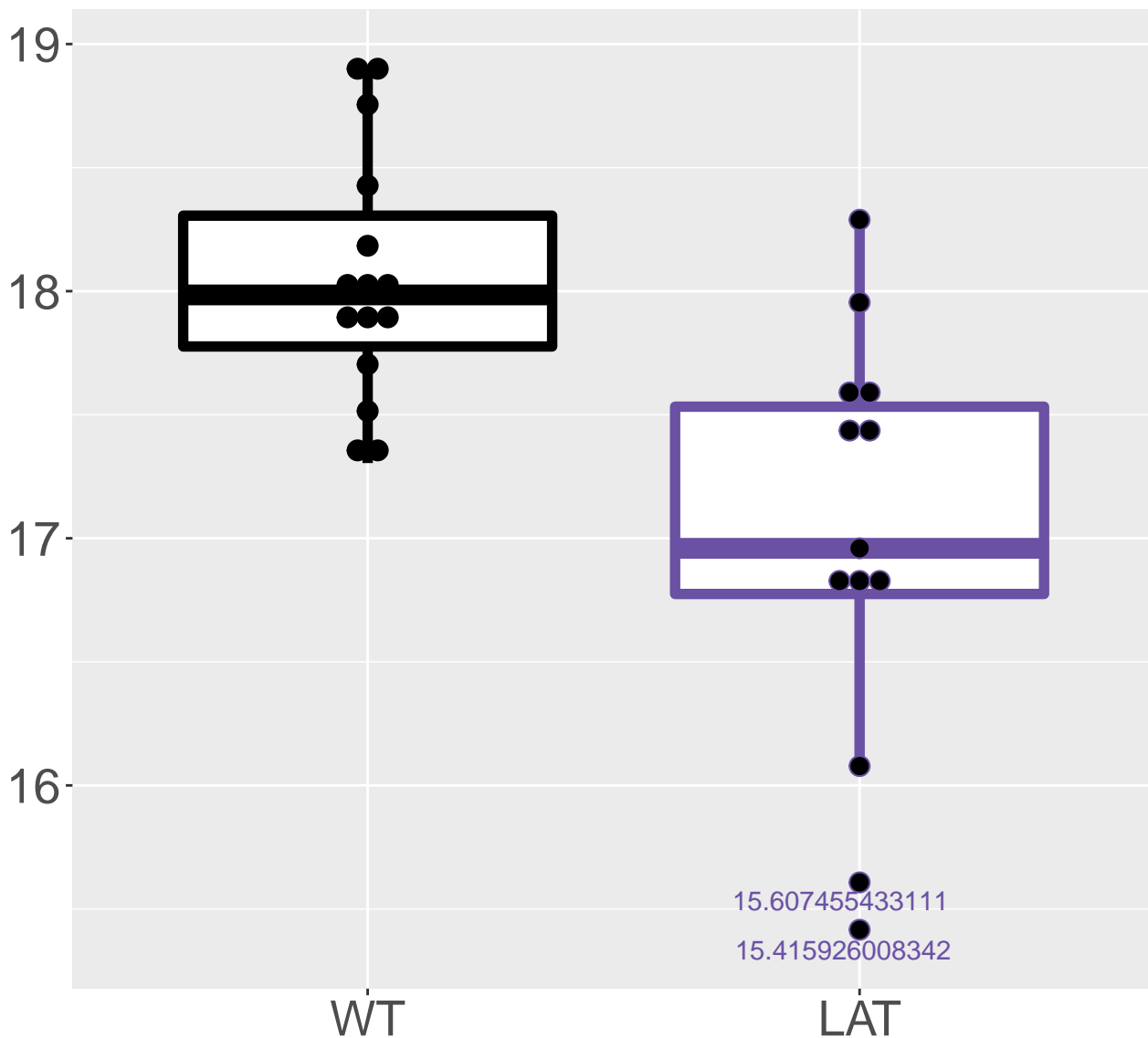
**M434.6378T640.3**

**FDR = 0.002, FC = -0.92**



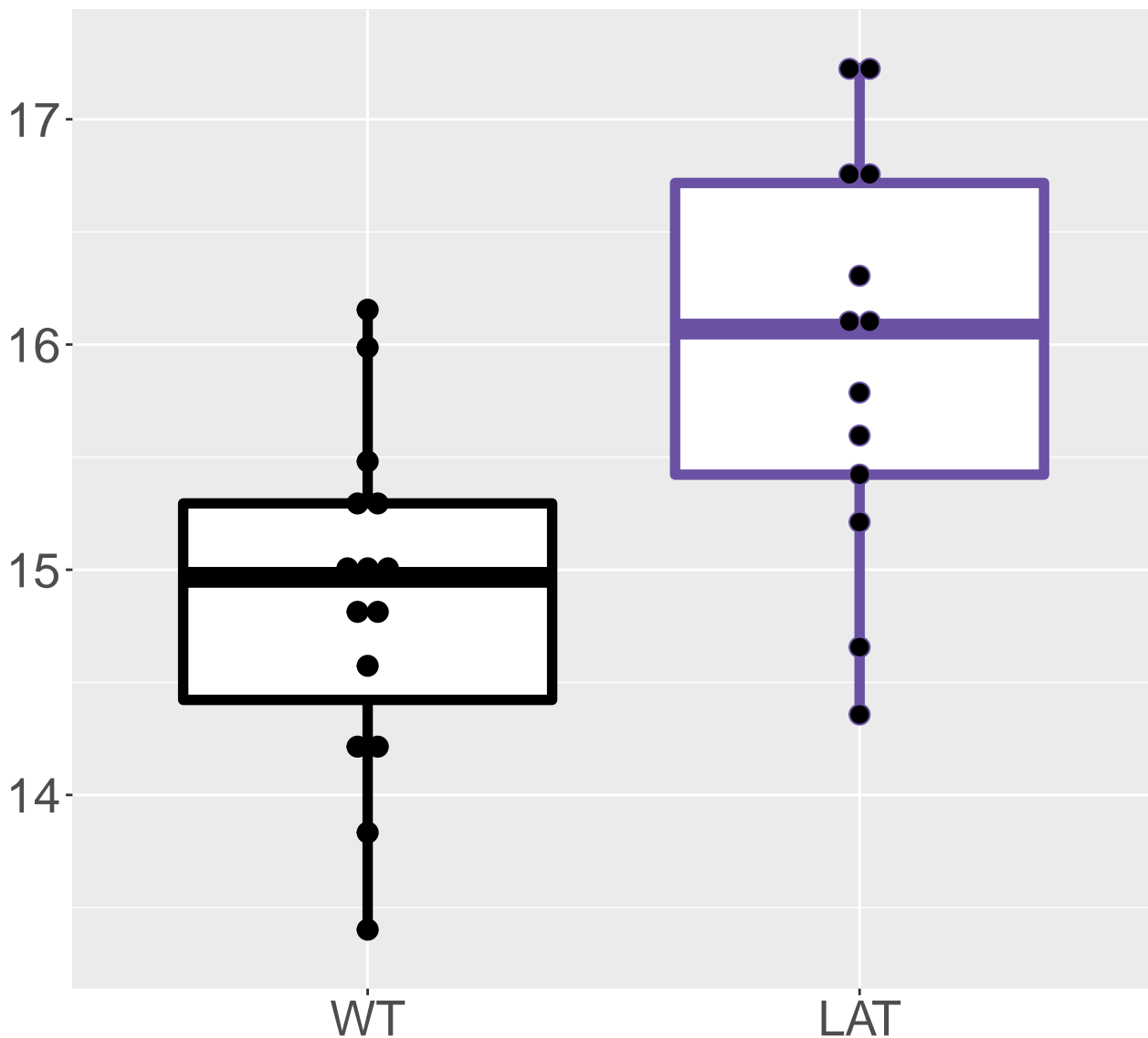
**M248.0778T397.08**

**FDR = 0.002, FC = -1.1**



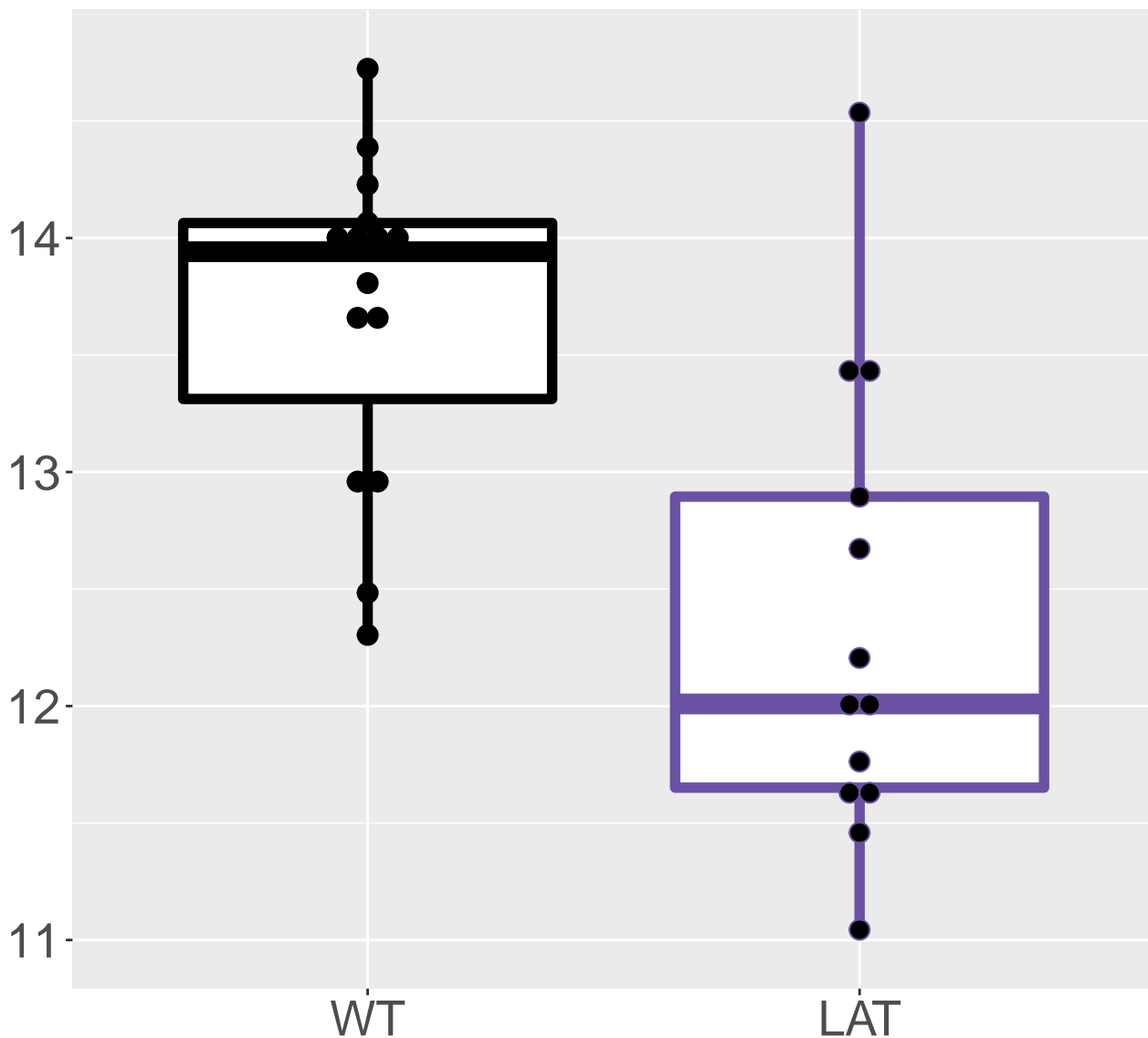
**M650.9306T555.52**

**FDR = 0.002, FC = 1.1, sex\*\***



**M545.507T675.98**

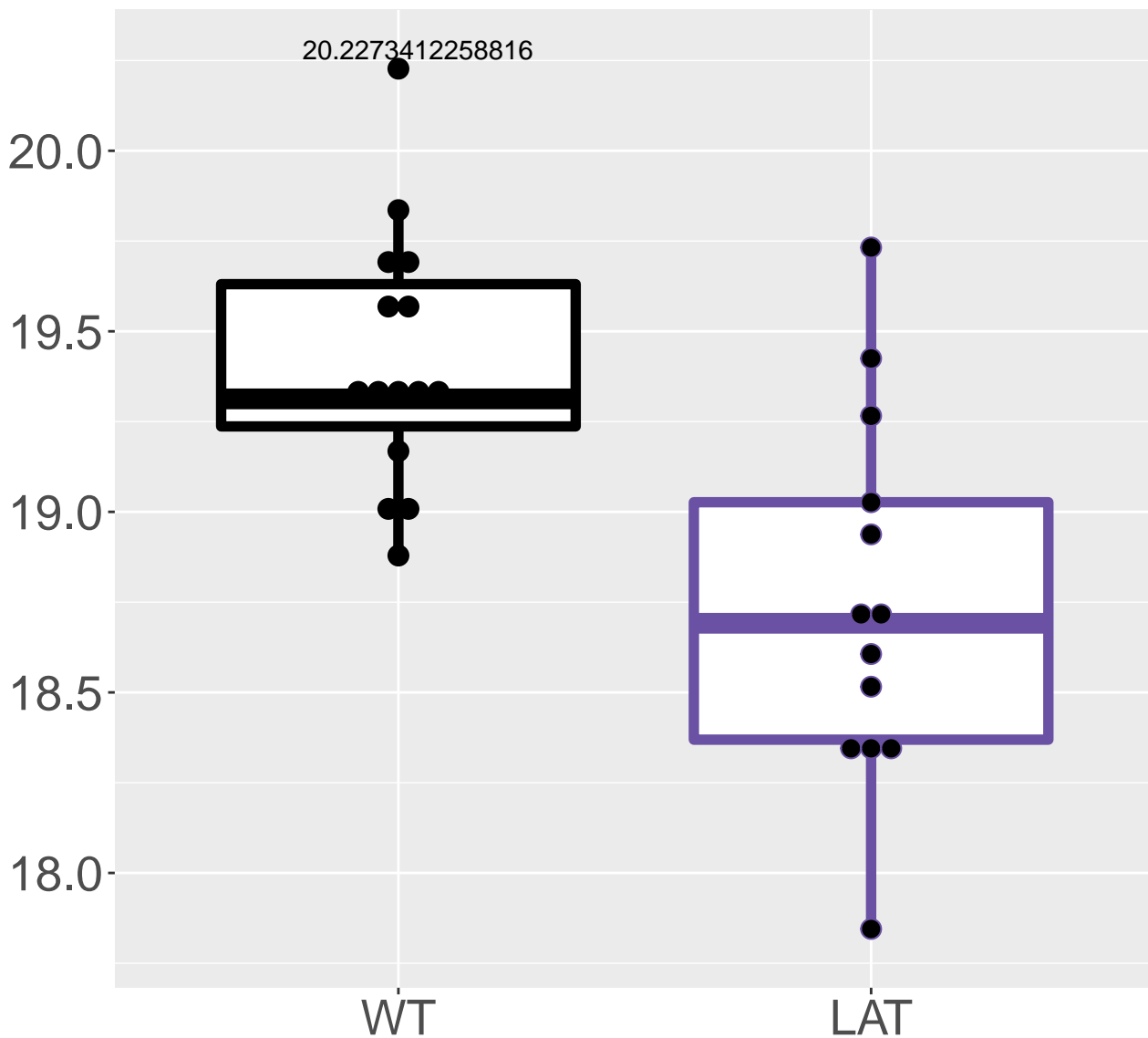
**FDR = 0.002, FC = -1.3**



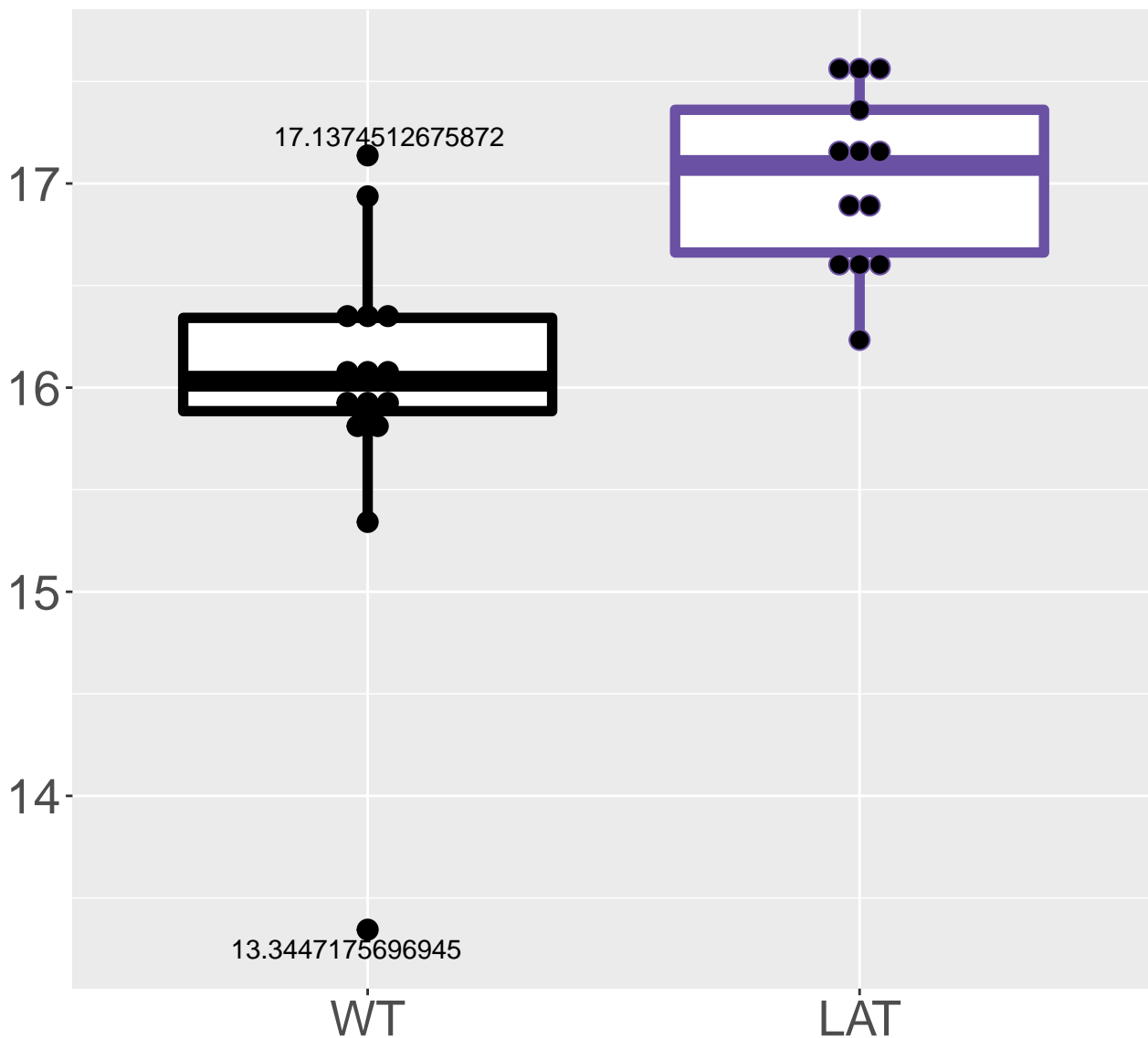
Box plot showing the distribution of the number of cells per cluster for WT (black box) and LAT (purple box) genotypes. The y-axis represents the number of cells per cluster, ranging from 16.5 to 18.9. The WT group shows a higher median number of cells per cluster compared to the LAT group.

Genotype	Median	Q1	Q3	Min	Max
WT	17.2167826965944	16.5180616552971	17.4728828249857	16.5180616552971	18.8960108358476
LAT	16.5180616552971	16.5180616552971	17.4728828249857	16.5180616552971	18.8960108358476

**M538.0666T546.17**  
**FDR = 0.002, FC = -0.66**



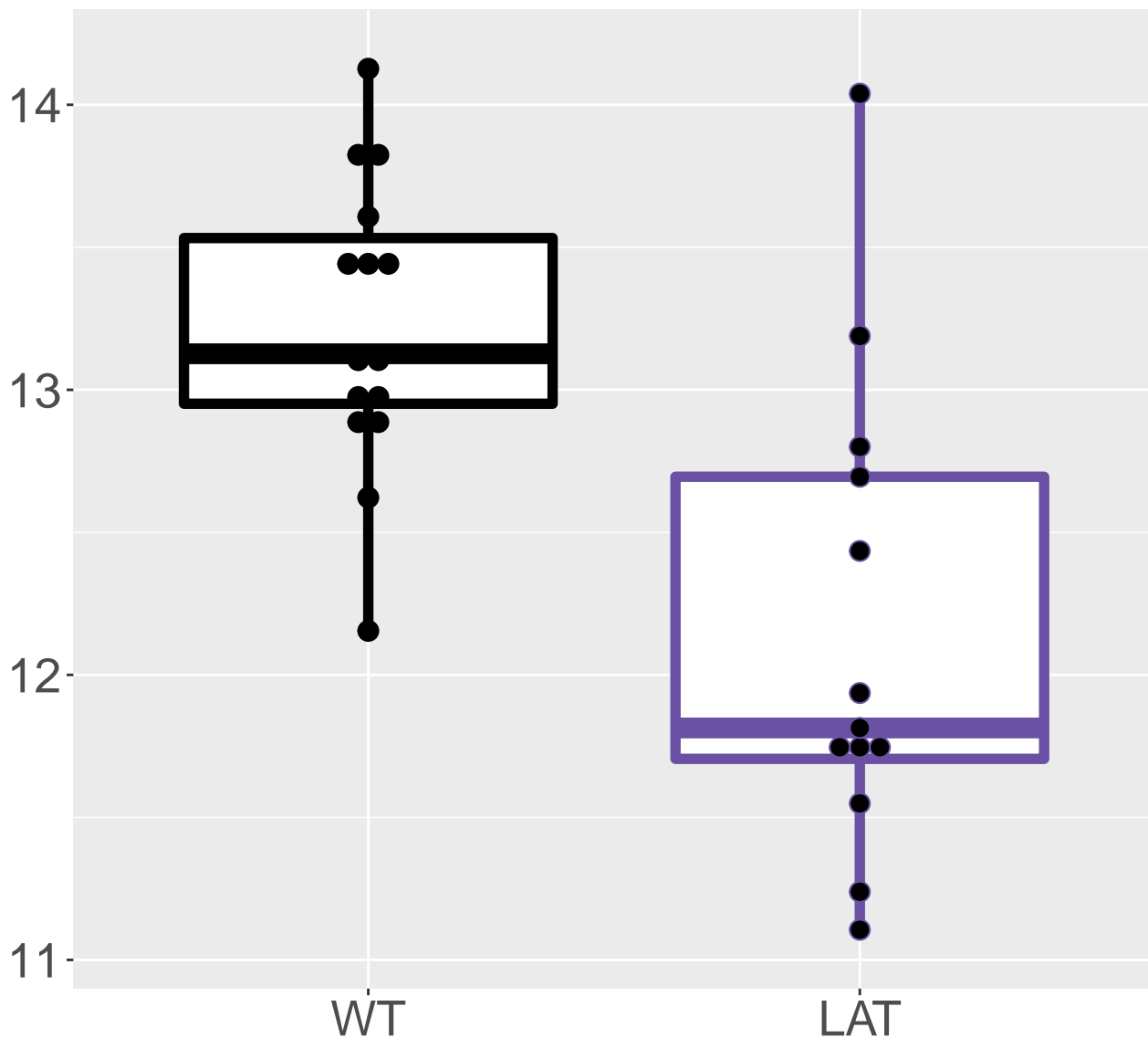
**M385.1107T369.09**  
**FDR = 0.002, FC = 1.1**





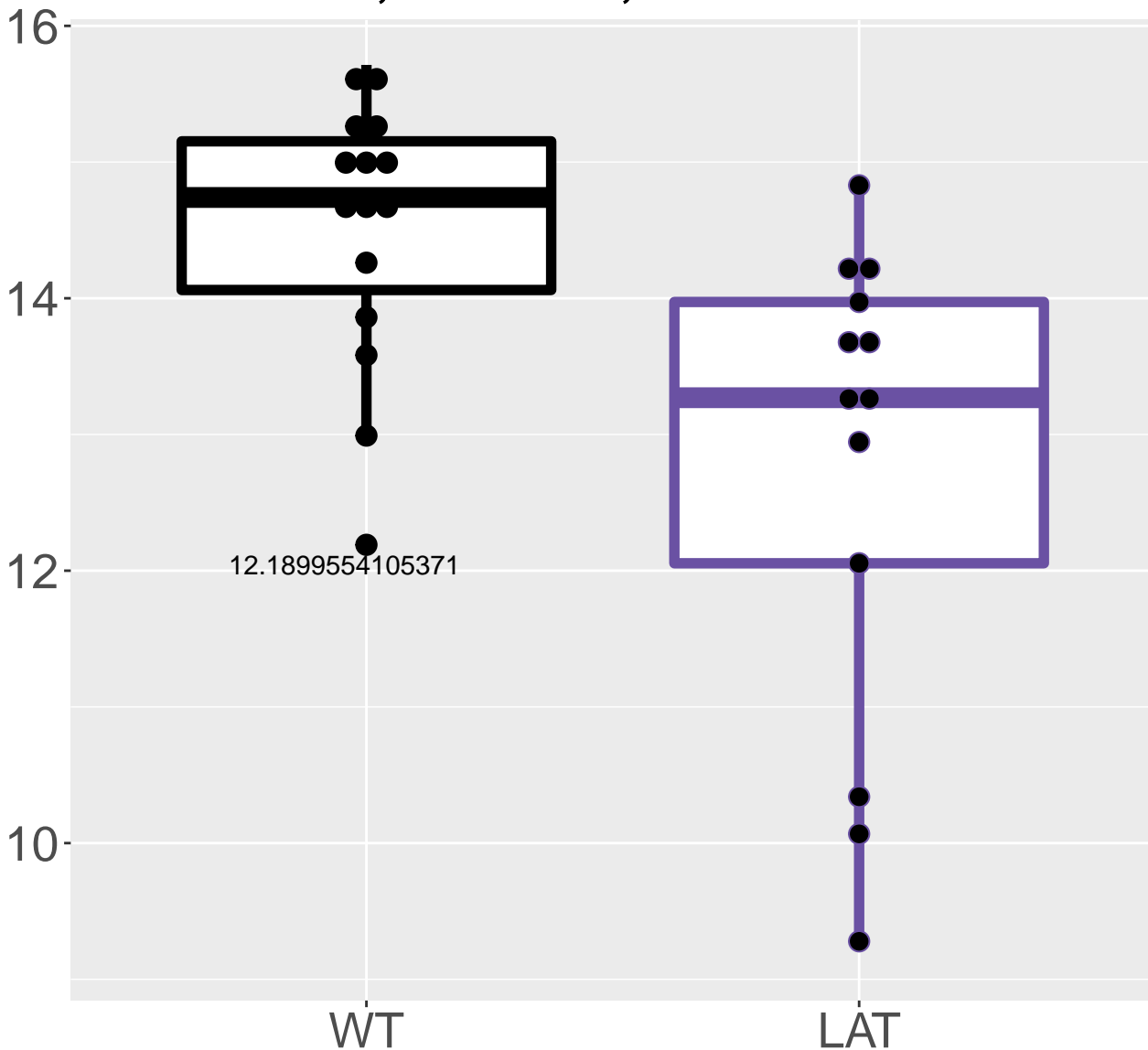
**M536.1678T650.94**

**FDR = 0.002, FC = -1.1**

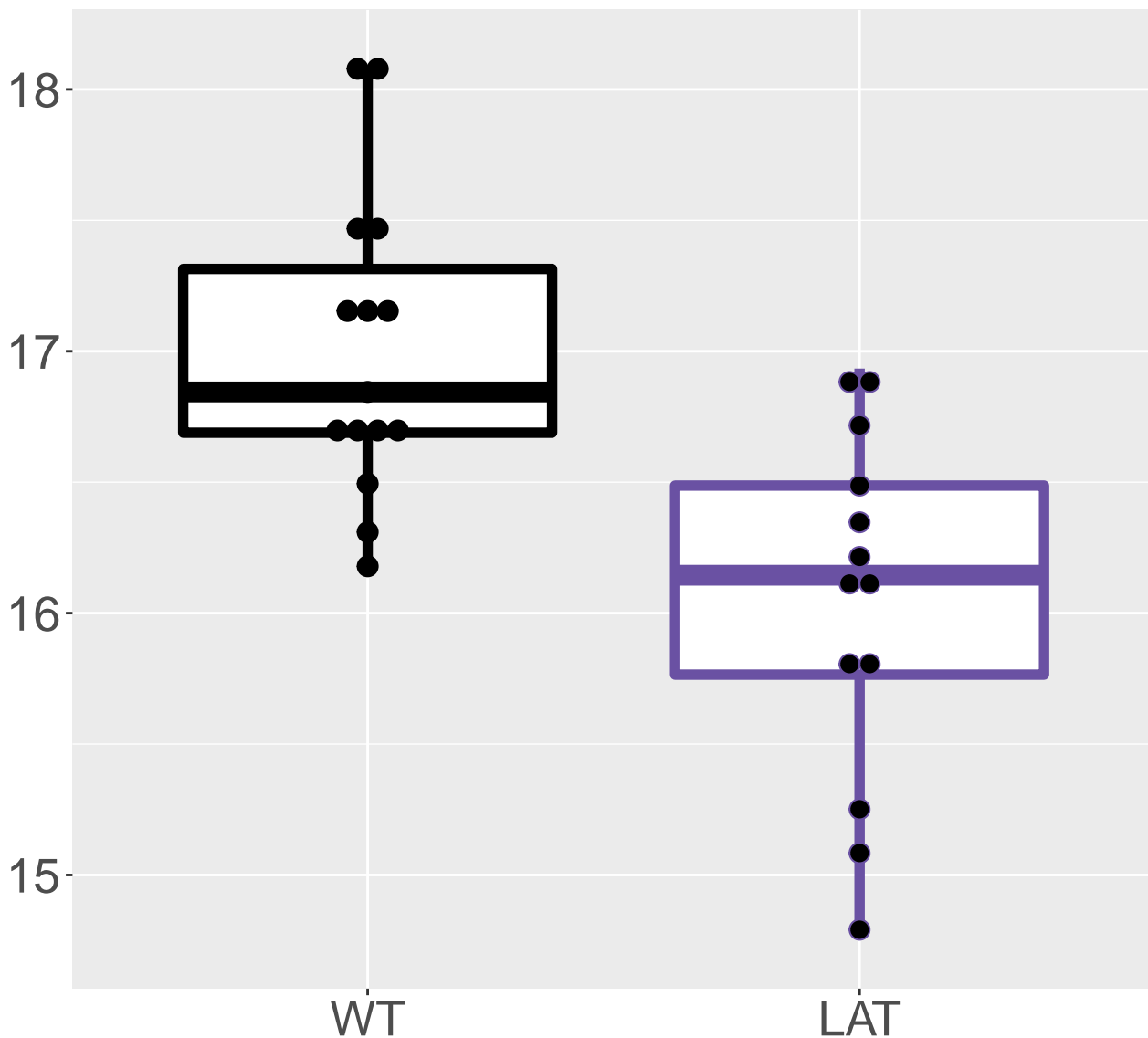


**M389.1683T329.47**

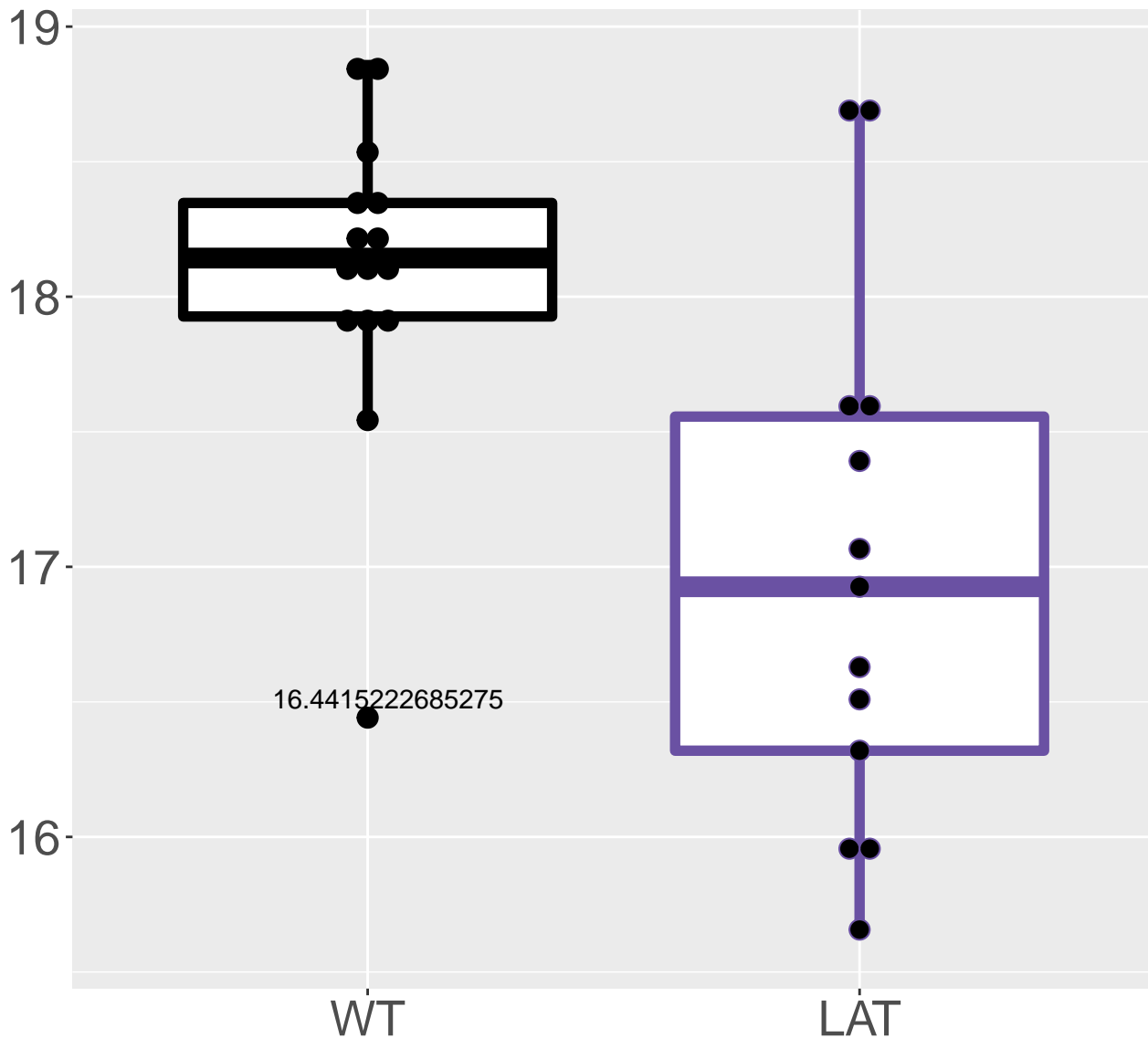
**FDR = 0.0021, FC = -1.8, sex\*\***



**M204.0514T397.96\_1**  
**FDR = 0.0021, FC = -0.97**

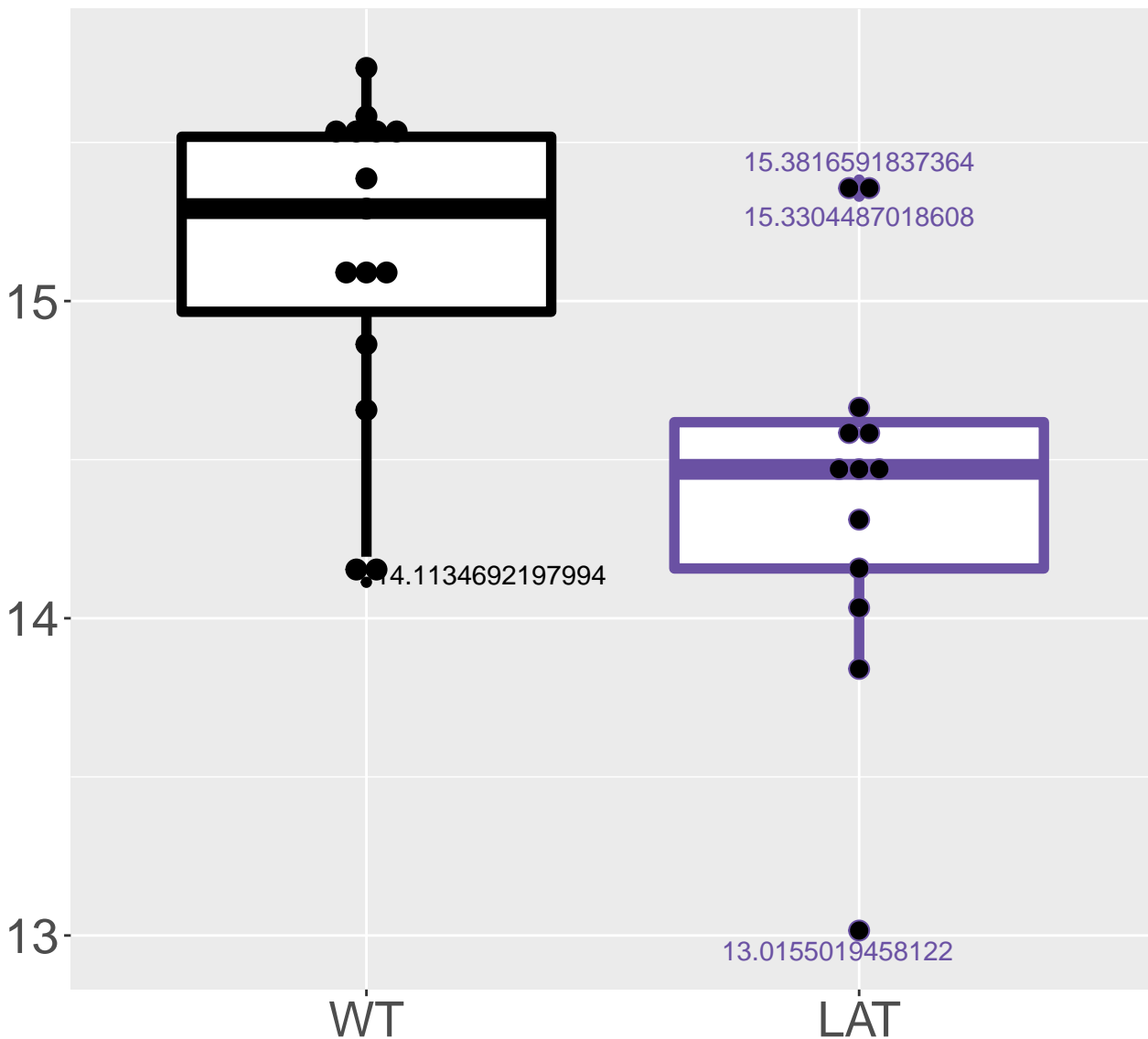


**M222.1349T227.35**  
**FDR = 0.0021, FC = -1.1**



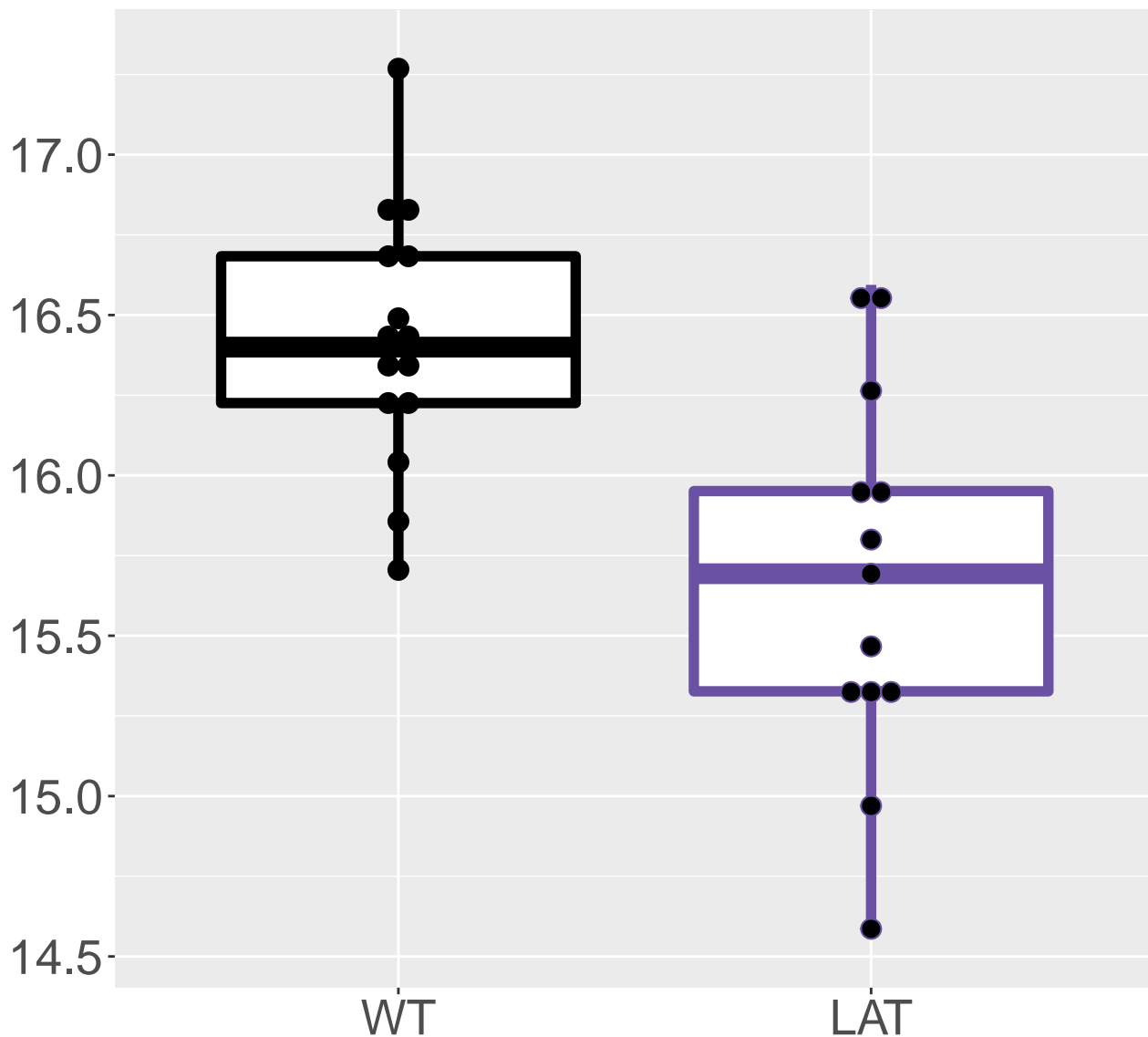
**M581.1706T505.84**

**FDR = 0.0022, FC = -0.74**



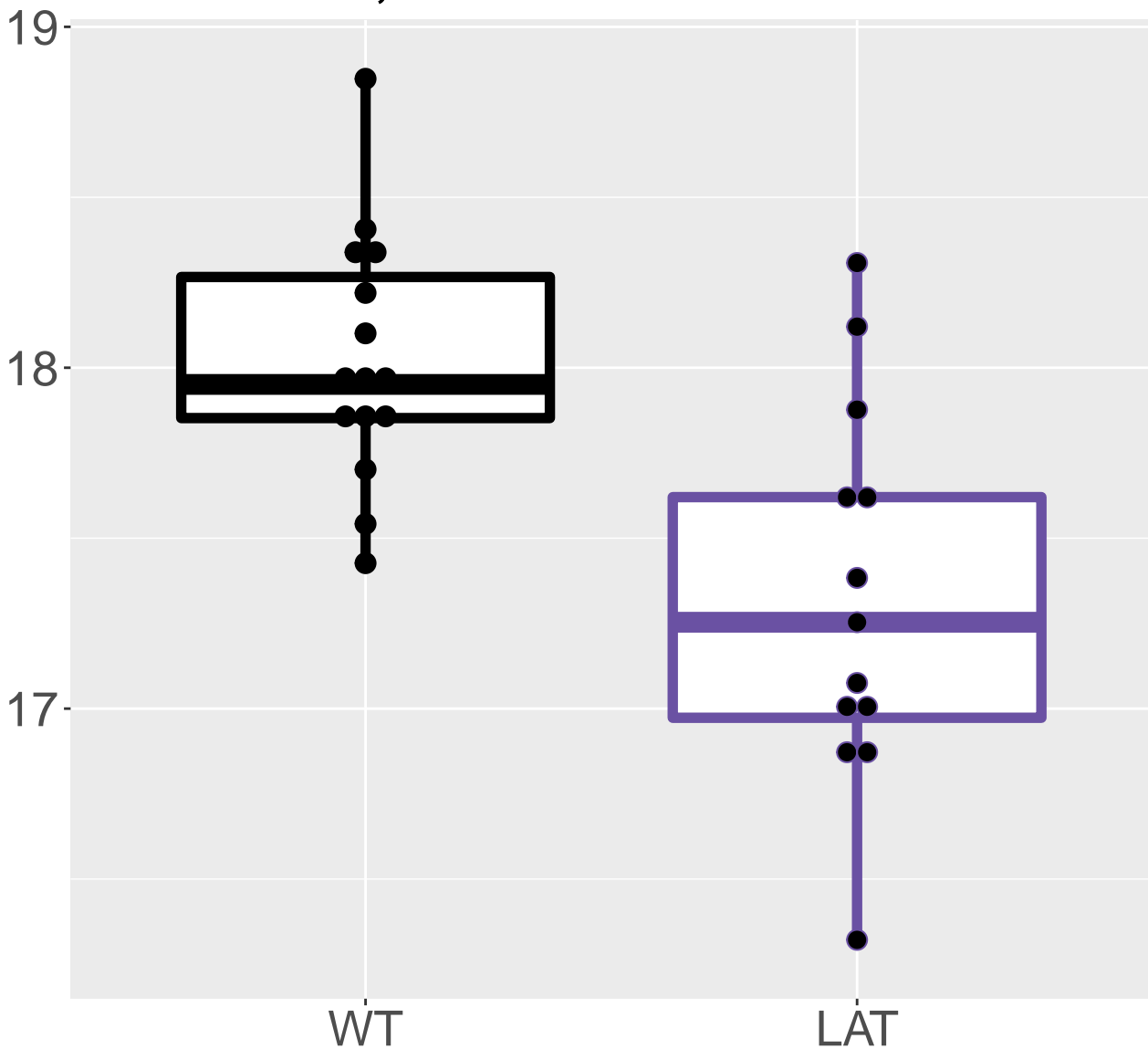
**M637.0446T547.09**

**FDR = 0.0022, FC = -0.75**



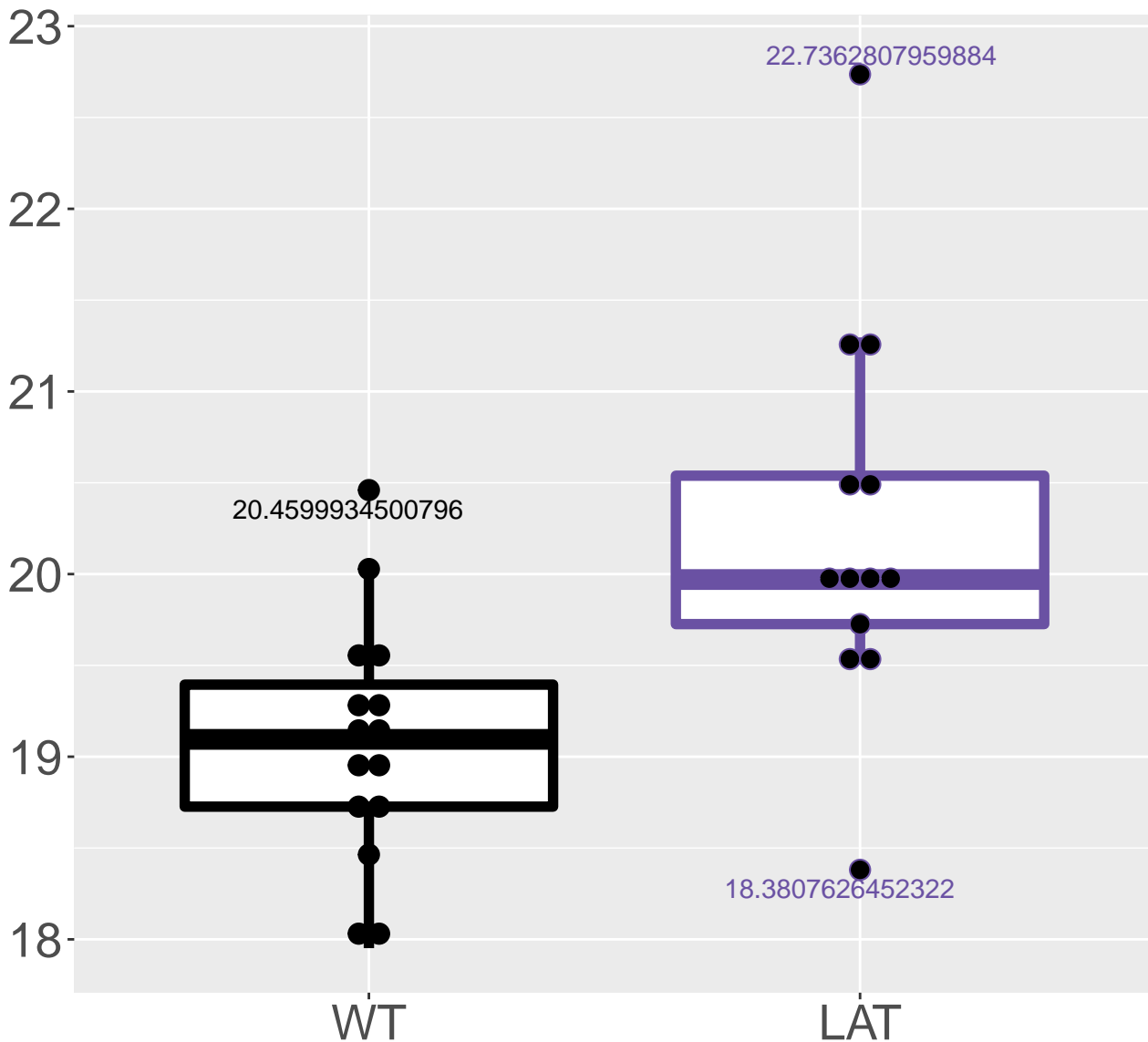
**M636.0436T547.42**

**FDR = 0.0023, FC = -0.69**



**M513.2729T86.2**

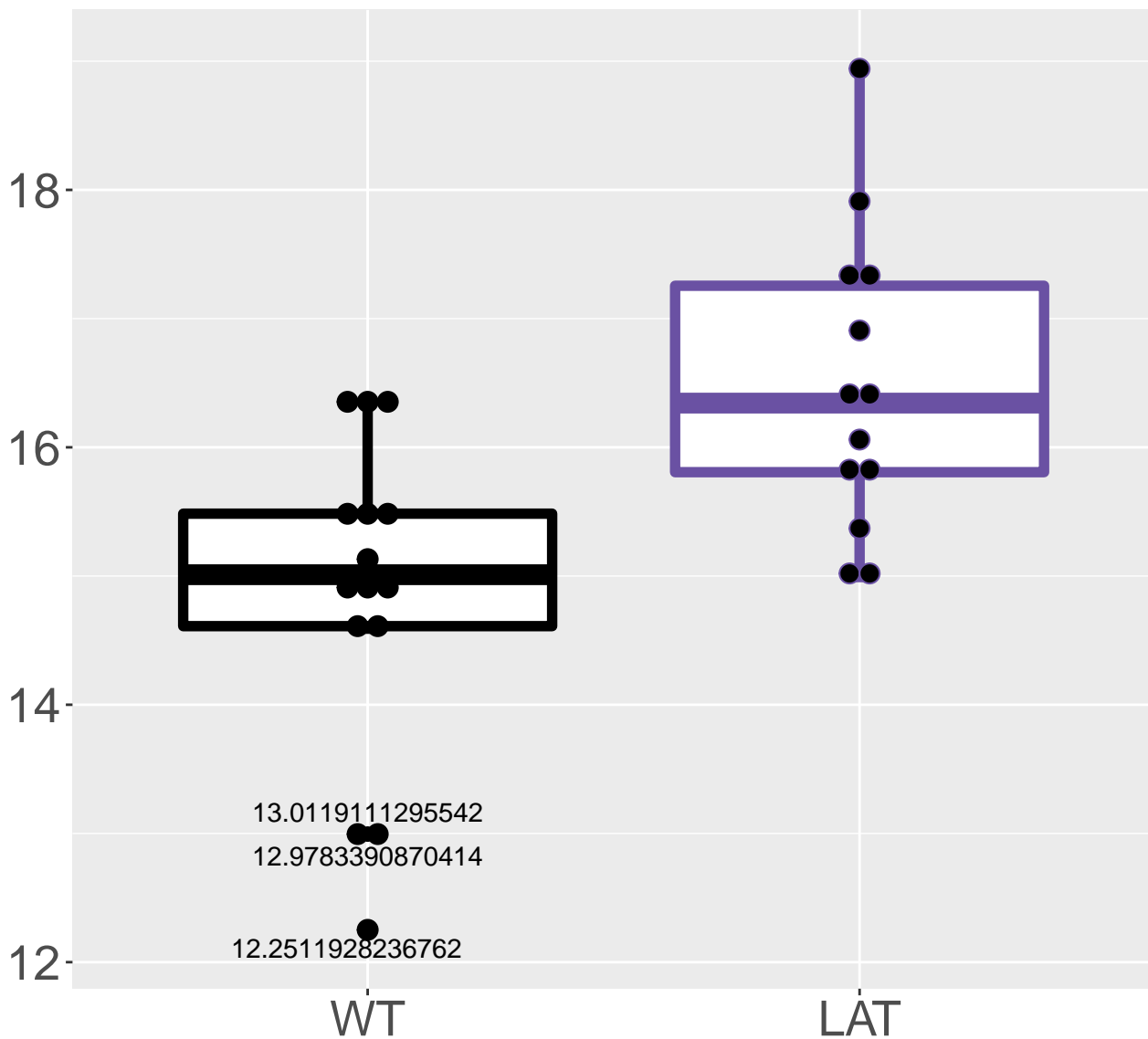
**FDR = 0.0023, FC = 1.2**





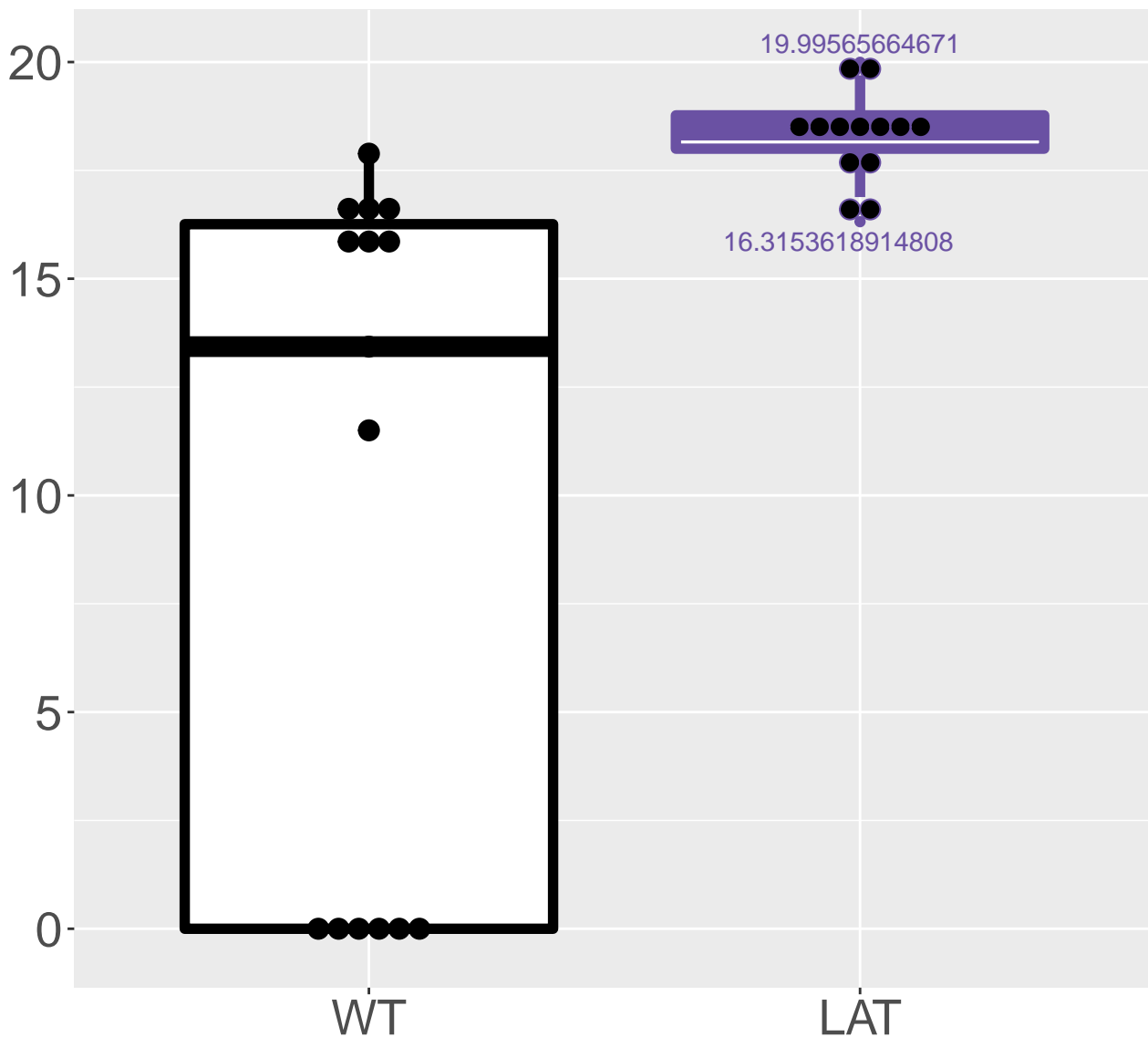
**M510.2547T87.09**

**FDR = 0.0023, FC = 1.6**

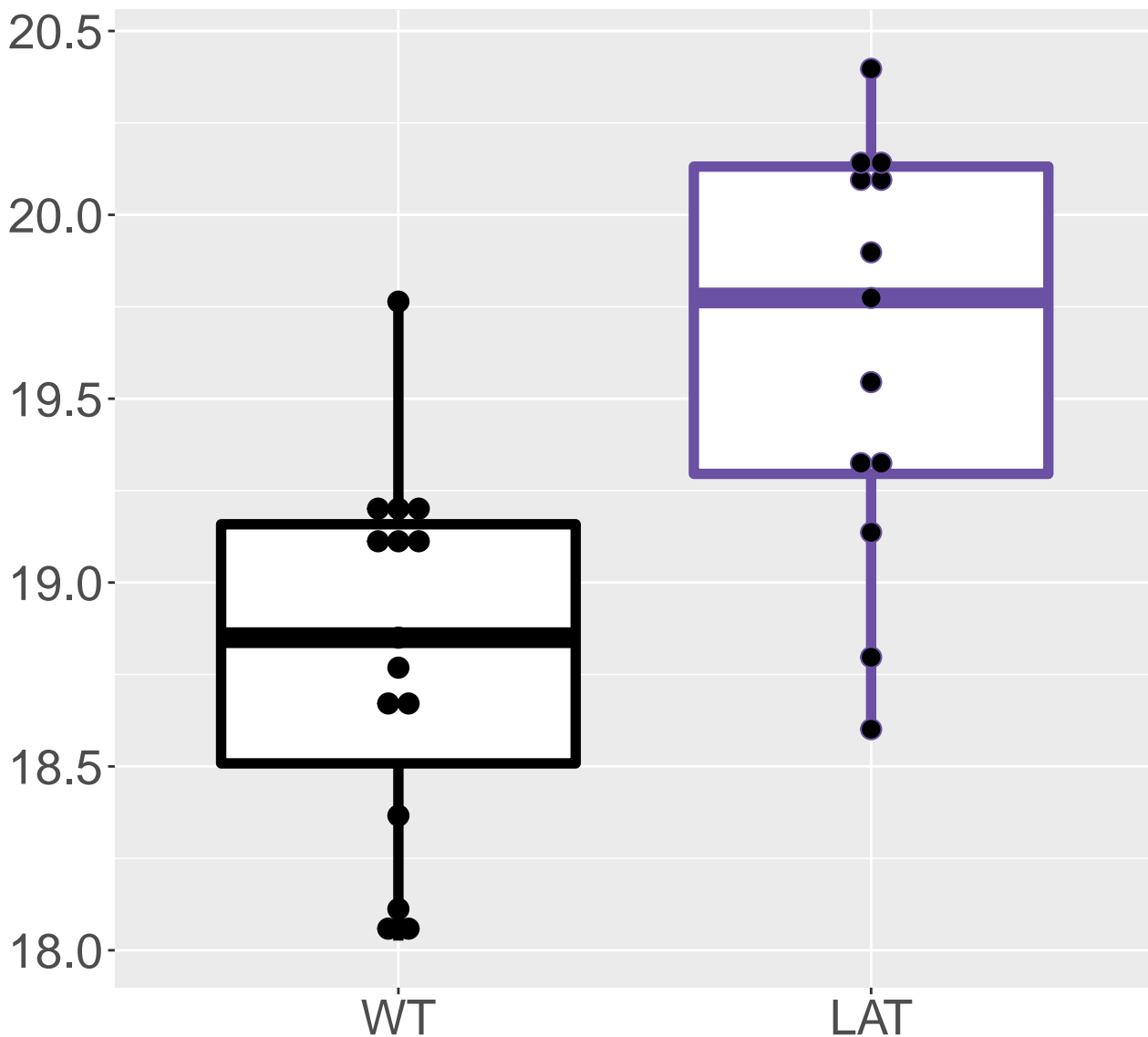


**M218.0088T189.5**

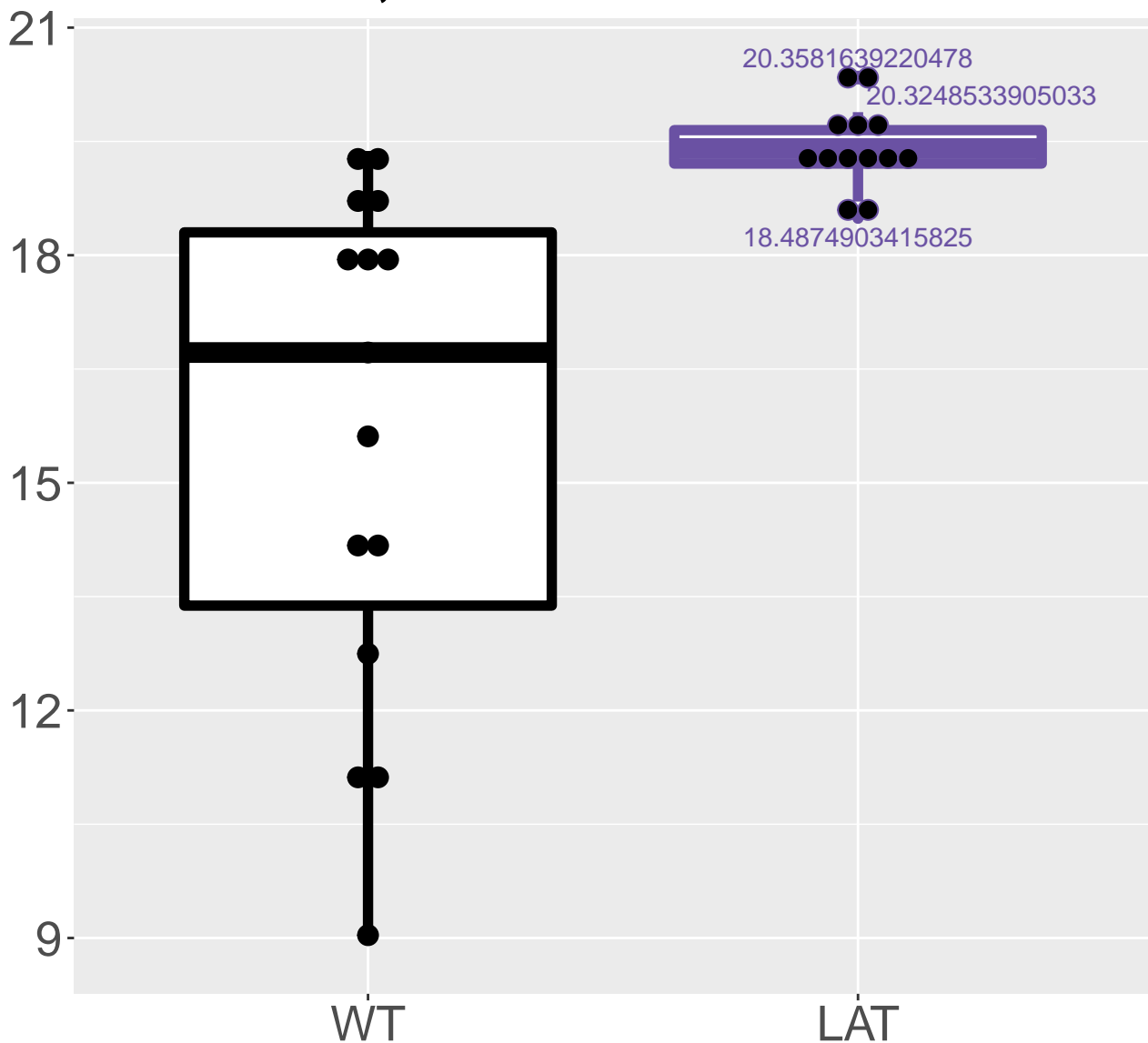
**FDR = 0.0024, FC = 9**



**M653.1561T589.13**  
**FDR = 0.0024, FC = 0.81**

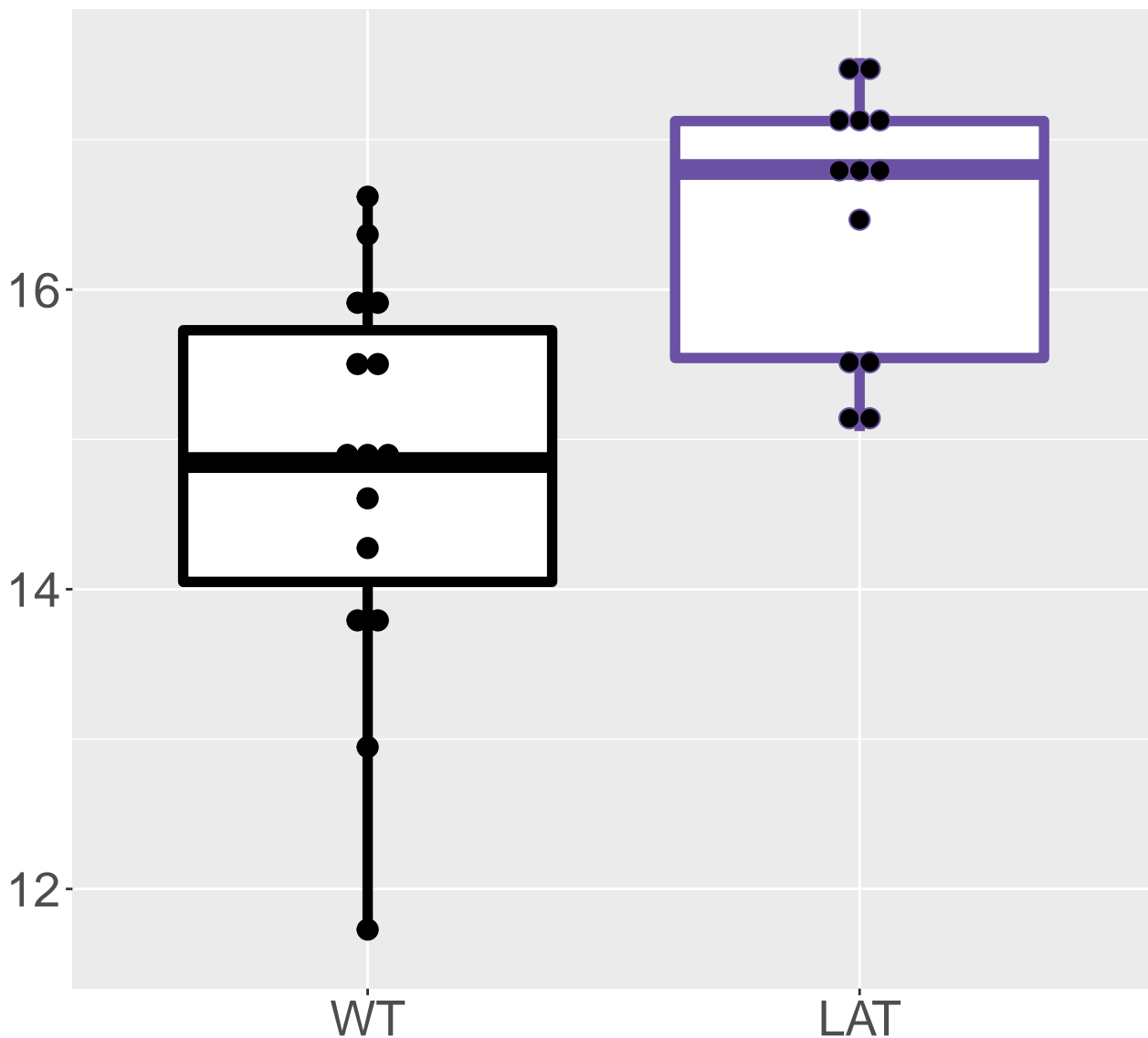


**M212.5076T573.82\_1**  
**FDR = 0.0024, FC = 3.8**

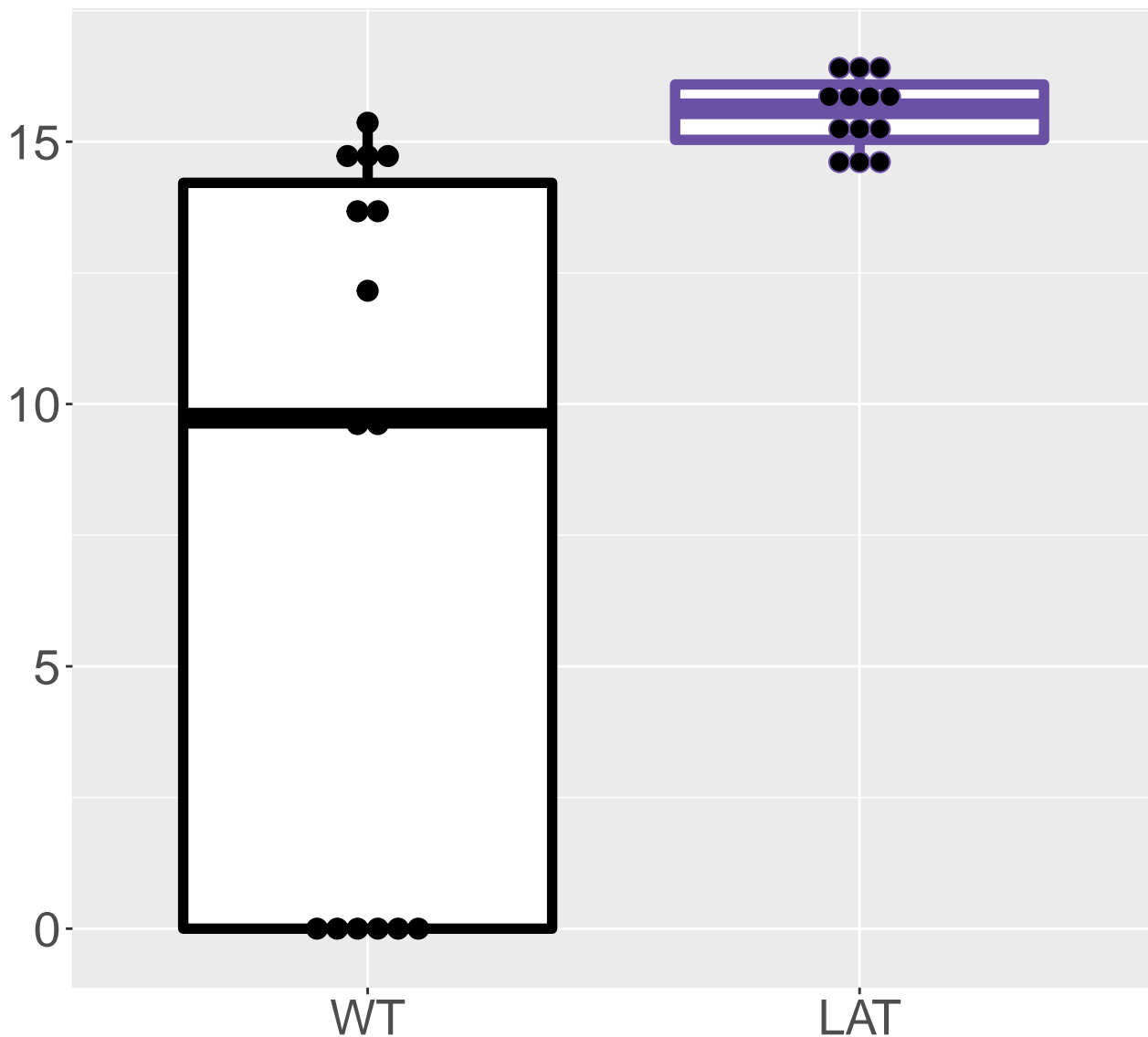


**M841.1606T592.13**

**FDR = 0.0024, FC = 1.7**

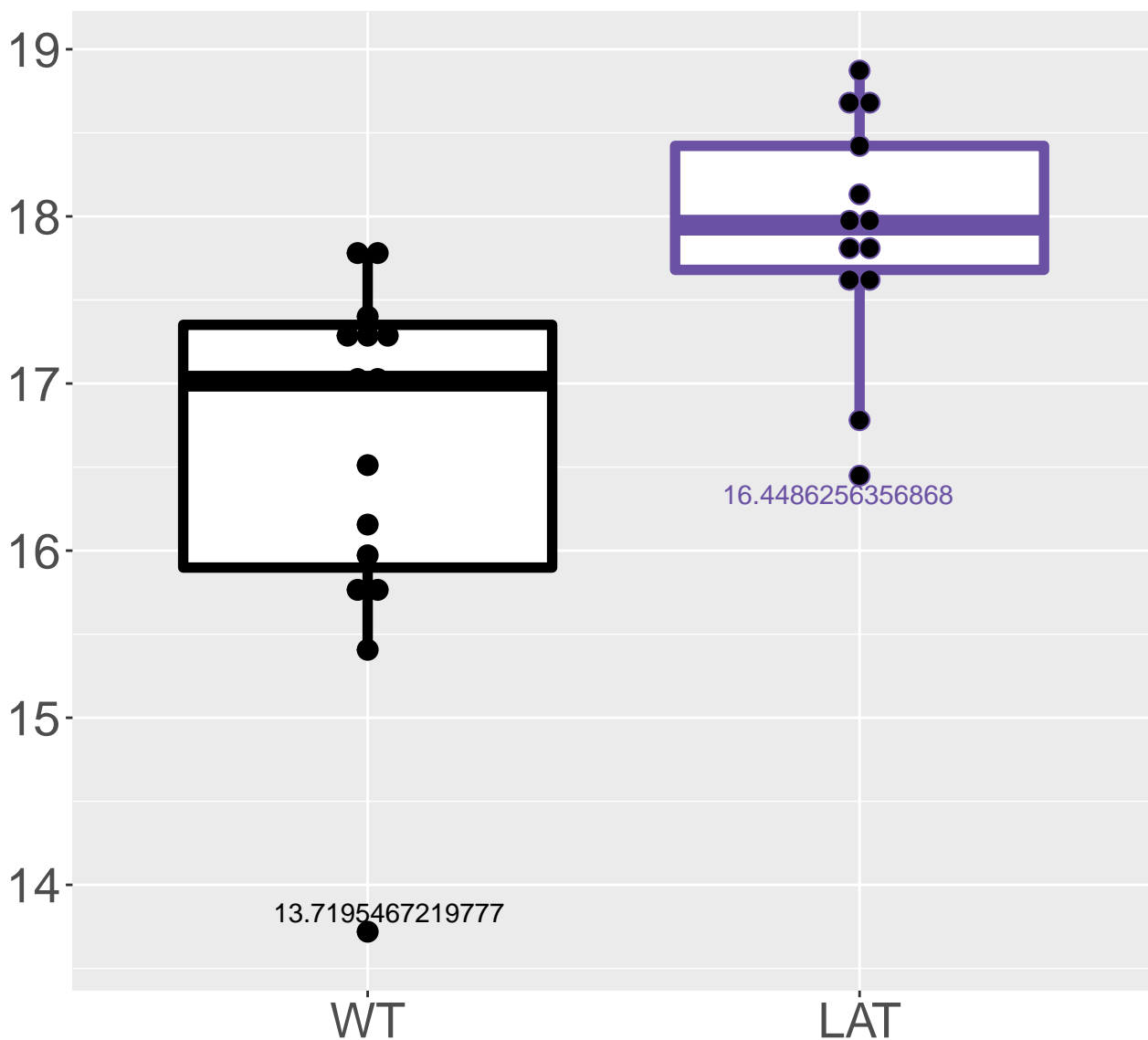


**M930.1914T573.38\_1**  
**FDR = 0.0024, FC = 7.7**



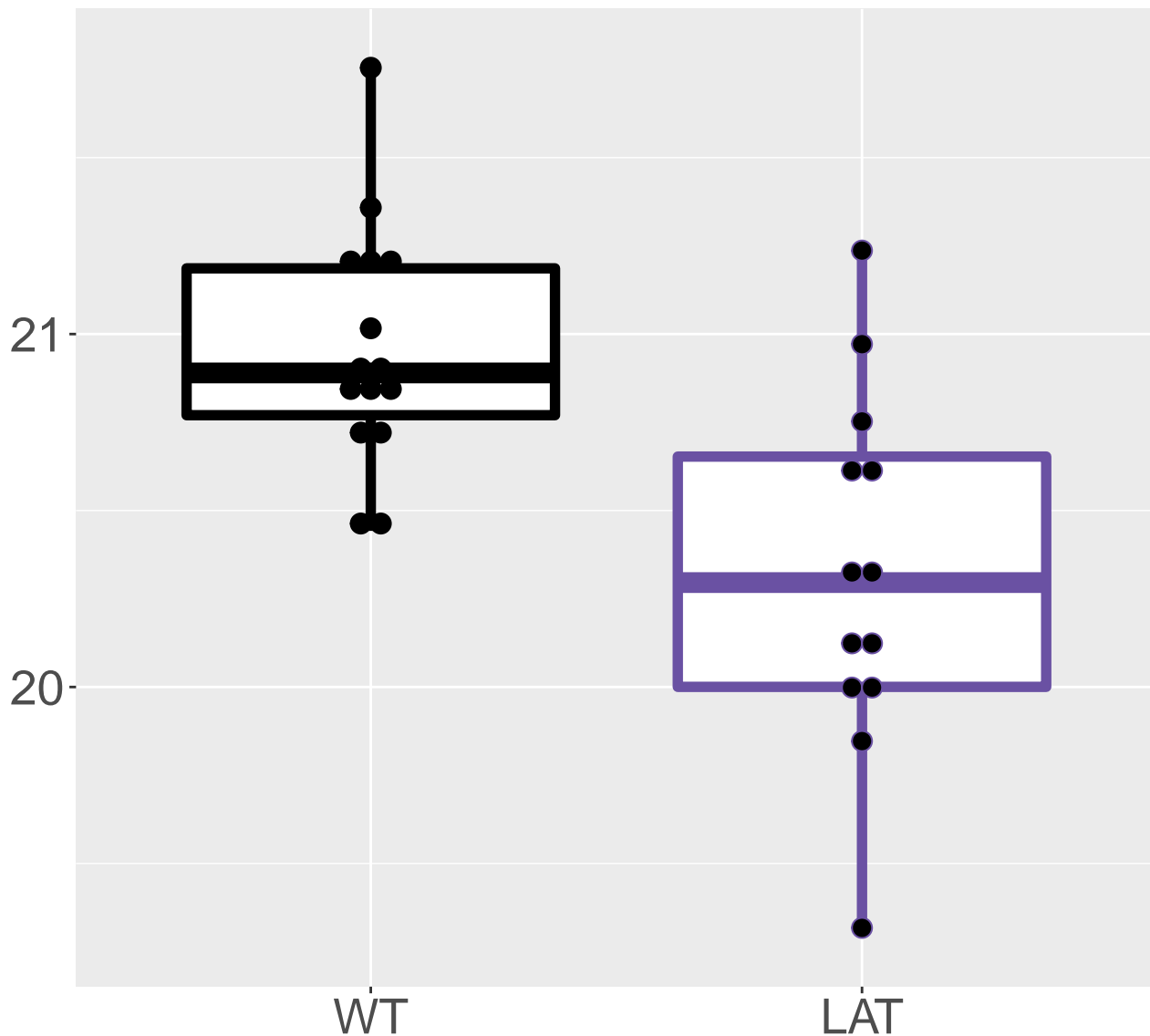
**M554.124T604.03**

**FDR = 0.0025, FC = 1.4**



**M635.0401T547.43**

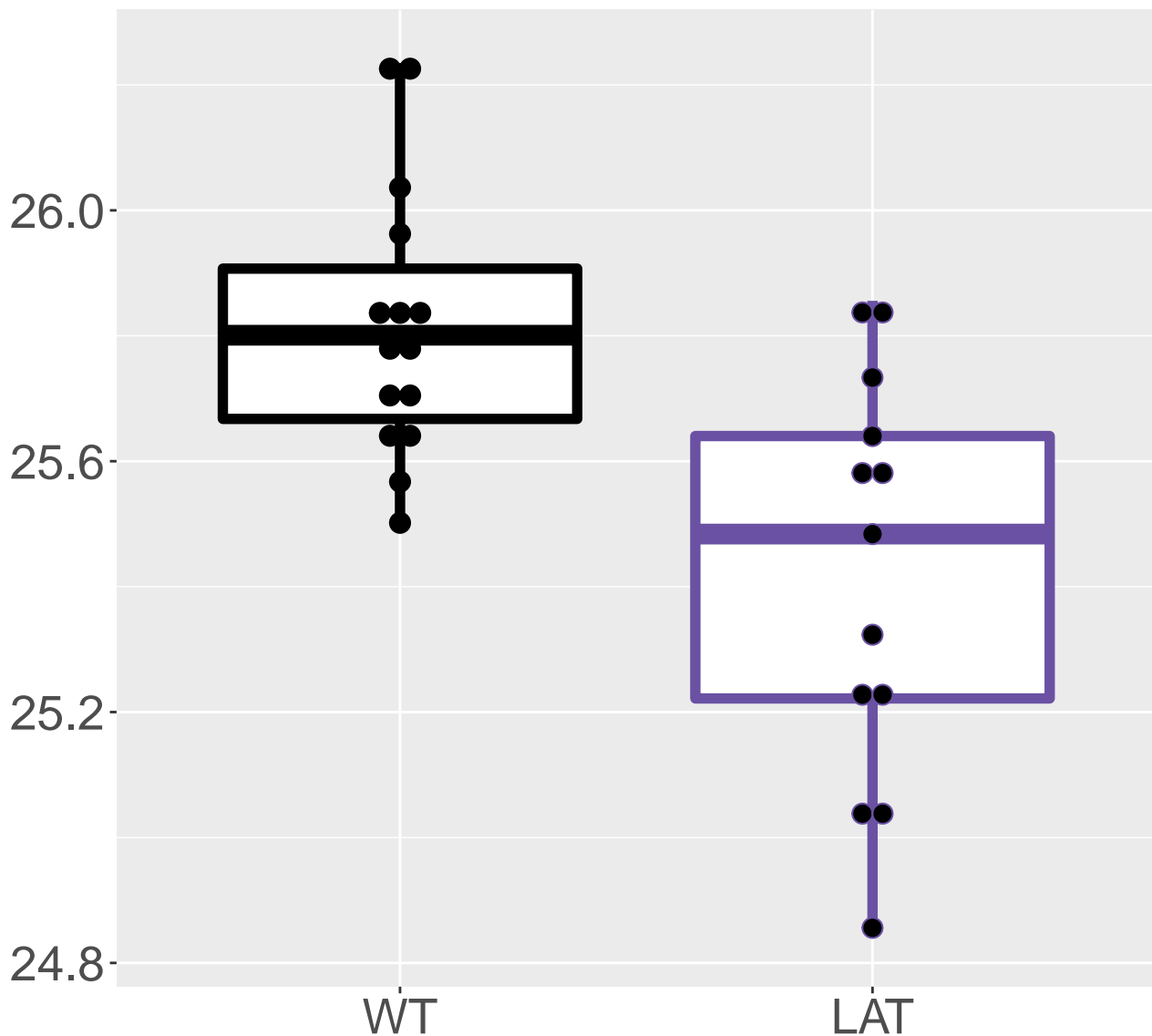
**FDR = 0.0026, FC = -0.64**





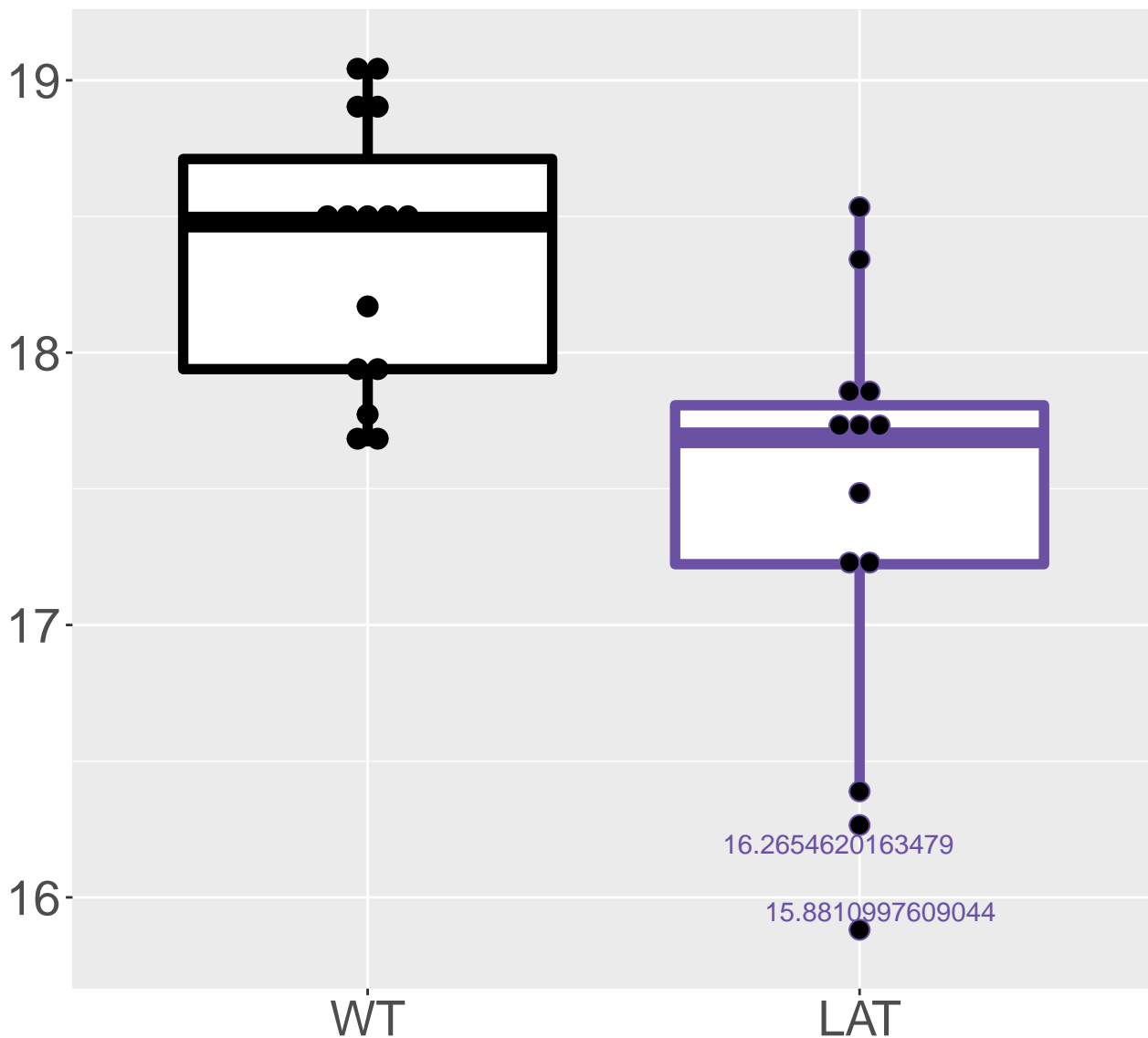
**M327.2332T76.85**

**FDR = 0.0026, FC = -0.4, sex\***



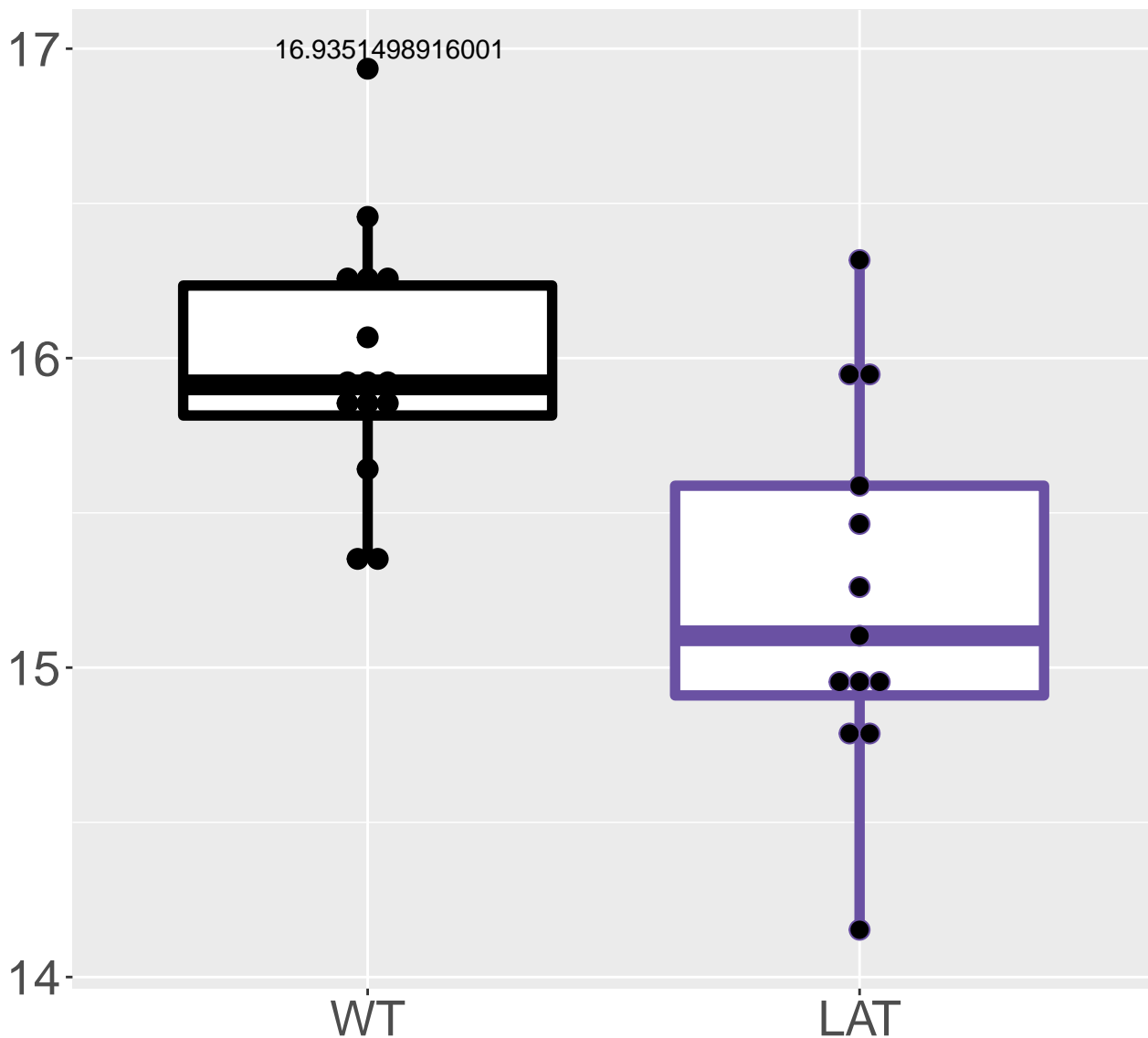
**M866.2912T530.89**

**FDR = 0.0027, FC = -0.97**



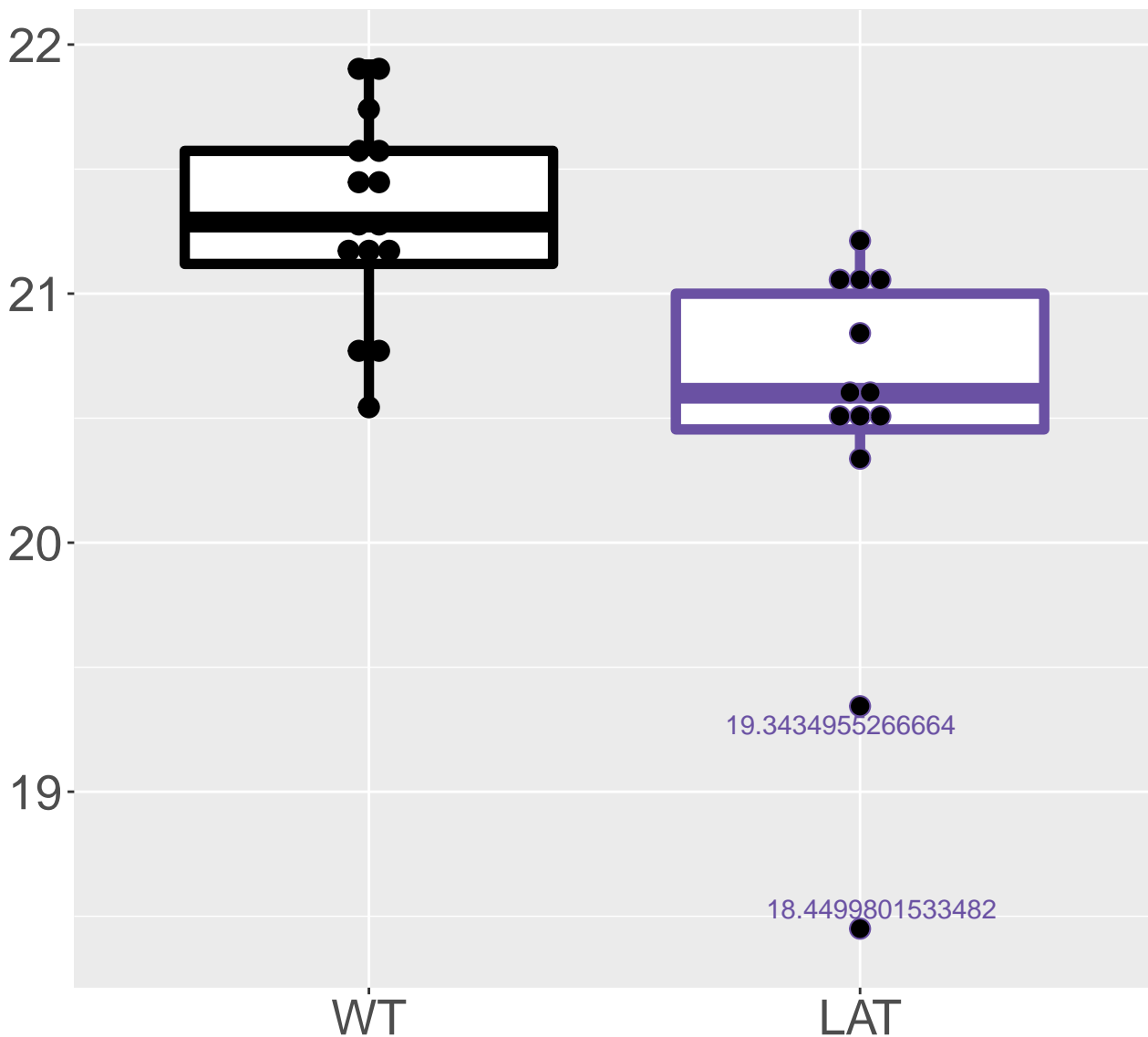
**M734.0209T547.95**

**FDR = 0.0027, FC = -0.74**



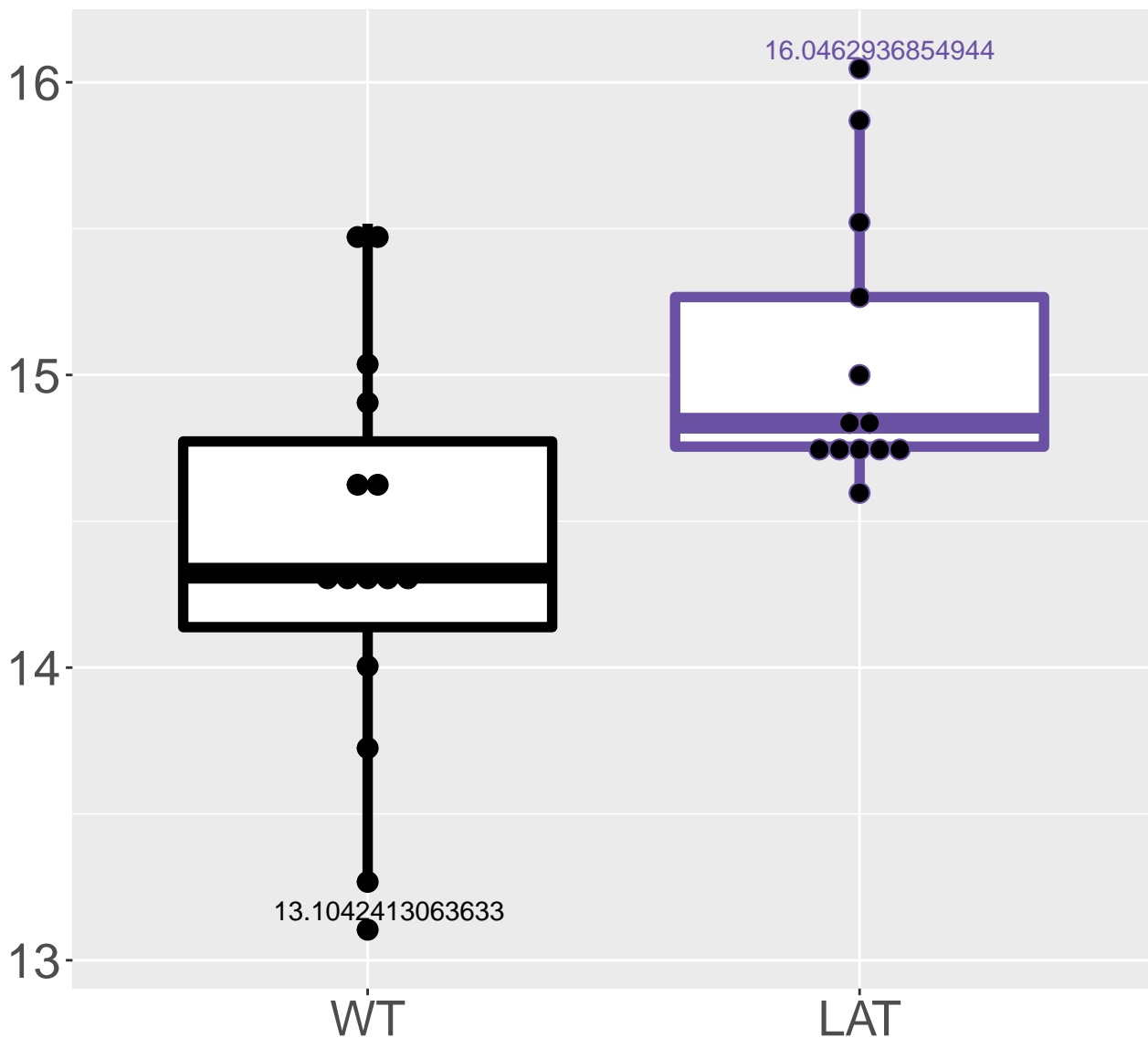
**M345.1042T432.79**

**FDR = 0.0027, FC = -0.85**

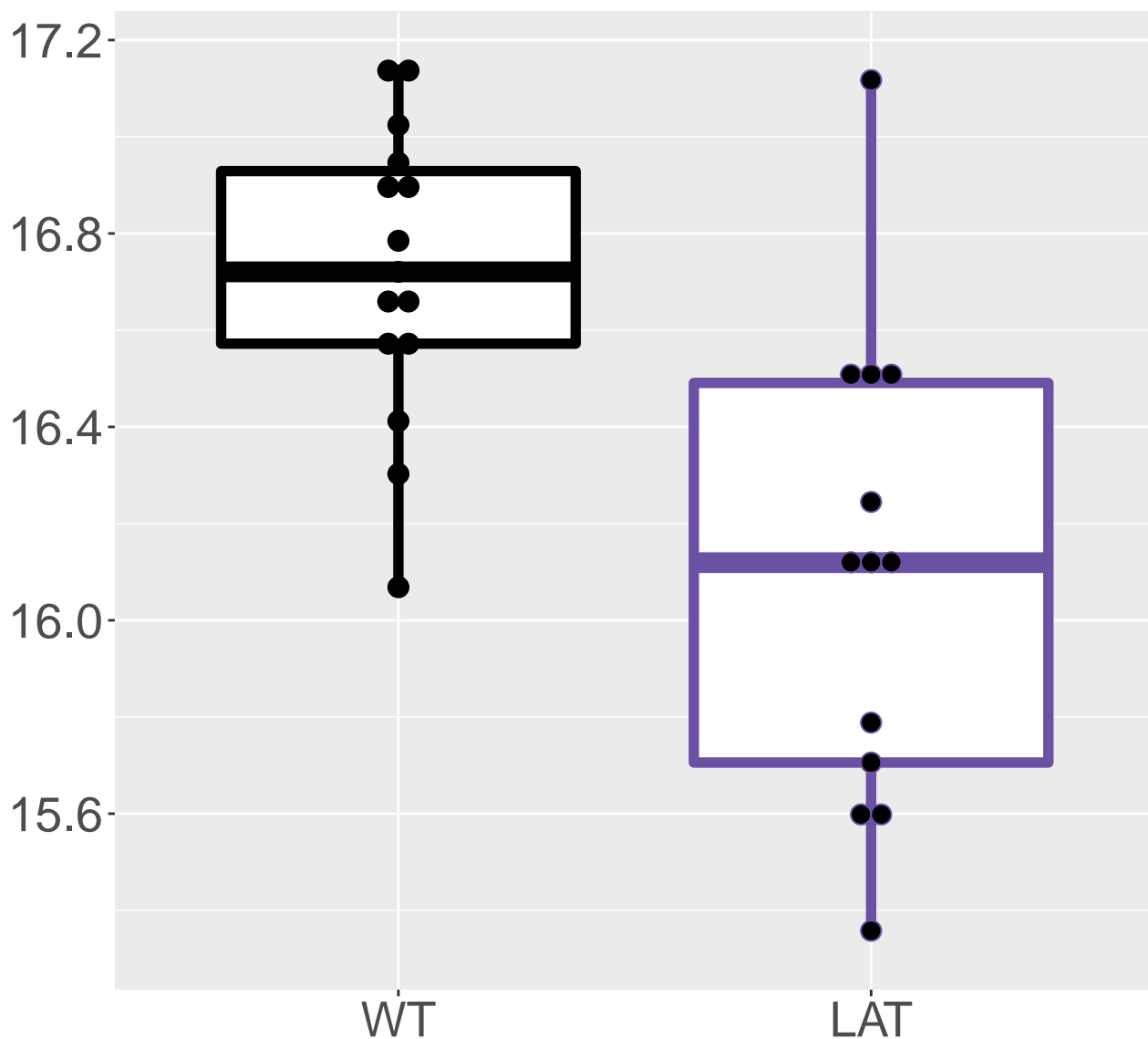


**M323.1467T607.73**

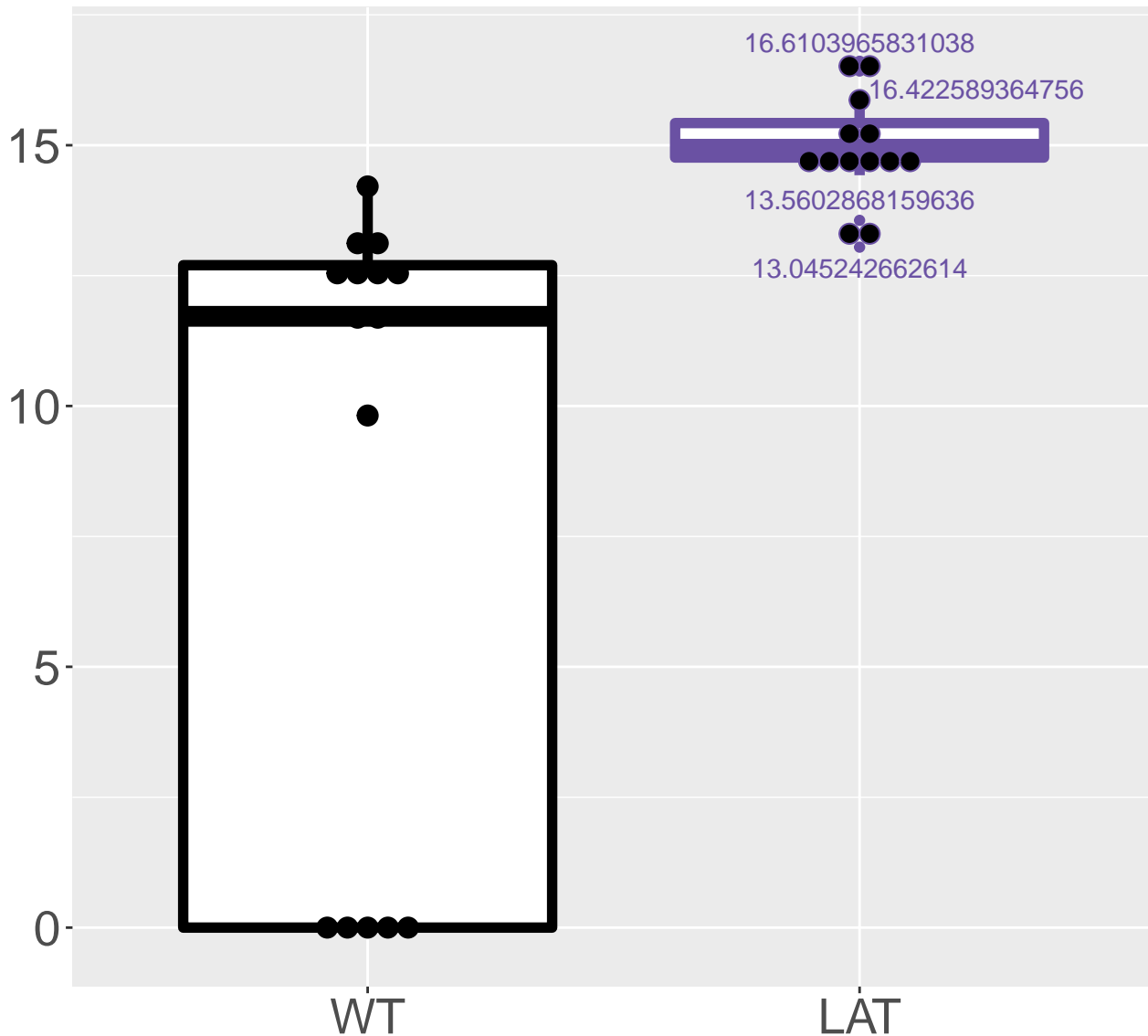
**FDR = 0.0027, FC = 0.67, sex\*\***



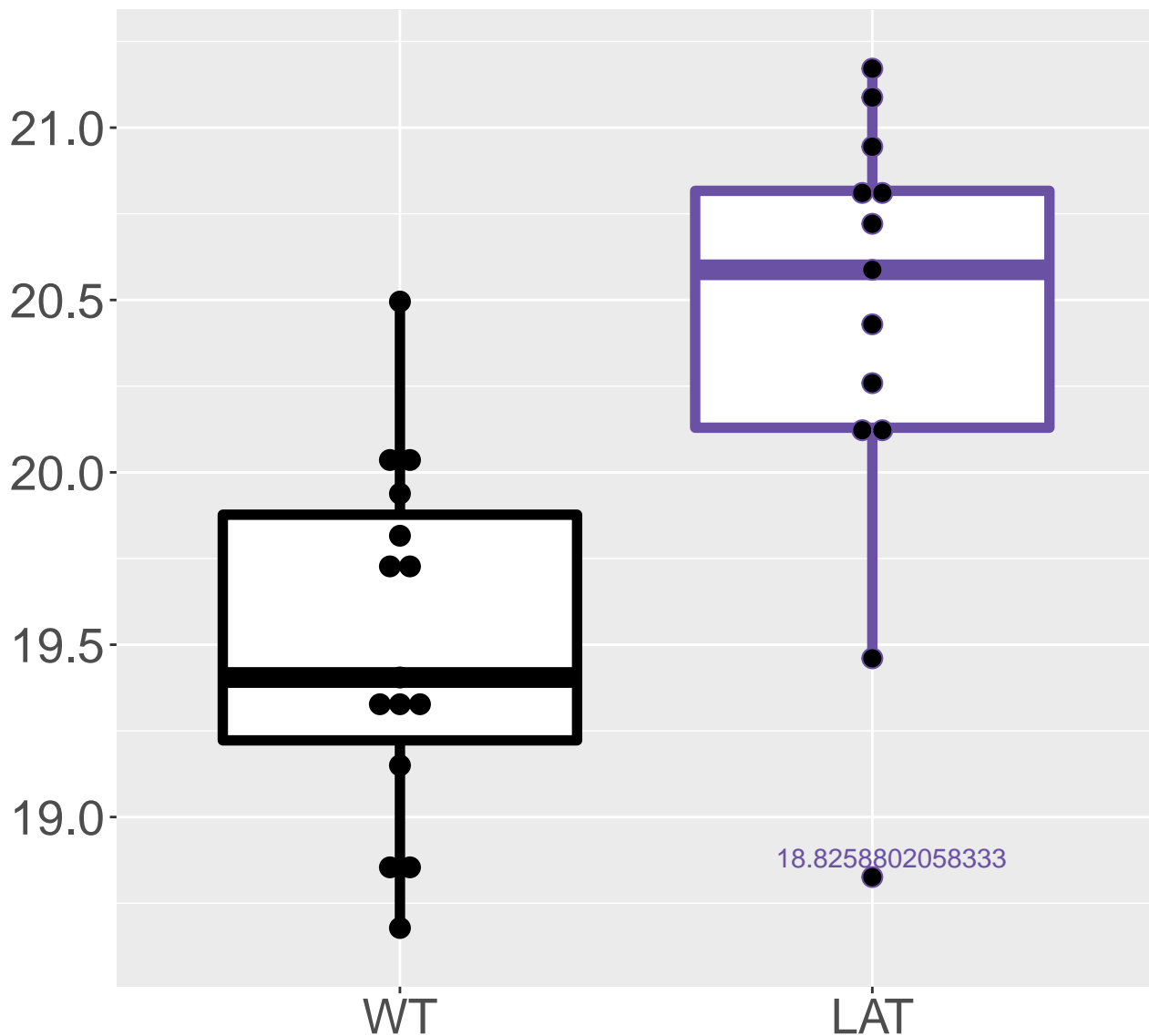
**M973.2939T603.17\_2**  
**FDR = 0.0028, FC = -0.62**



**M307.0445T513.38**  
**FDR = 0.0028, FC = 6.7**

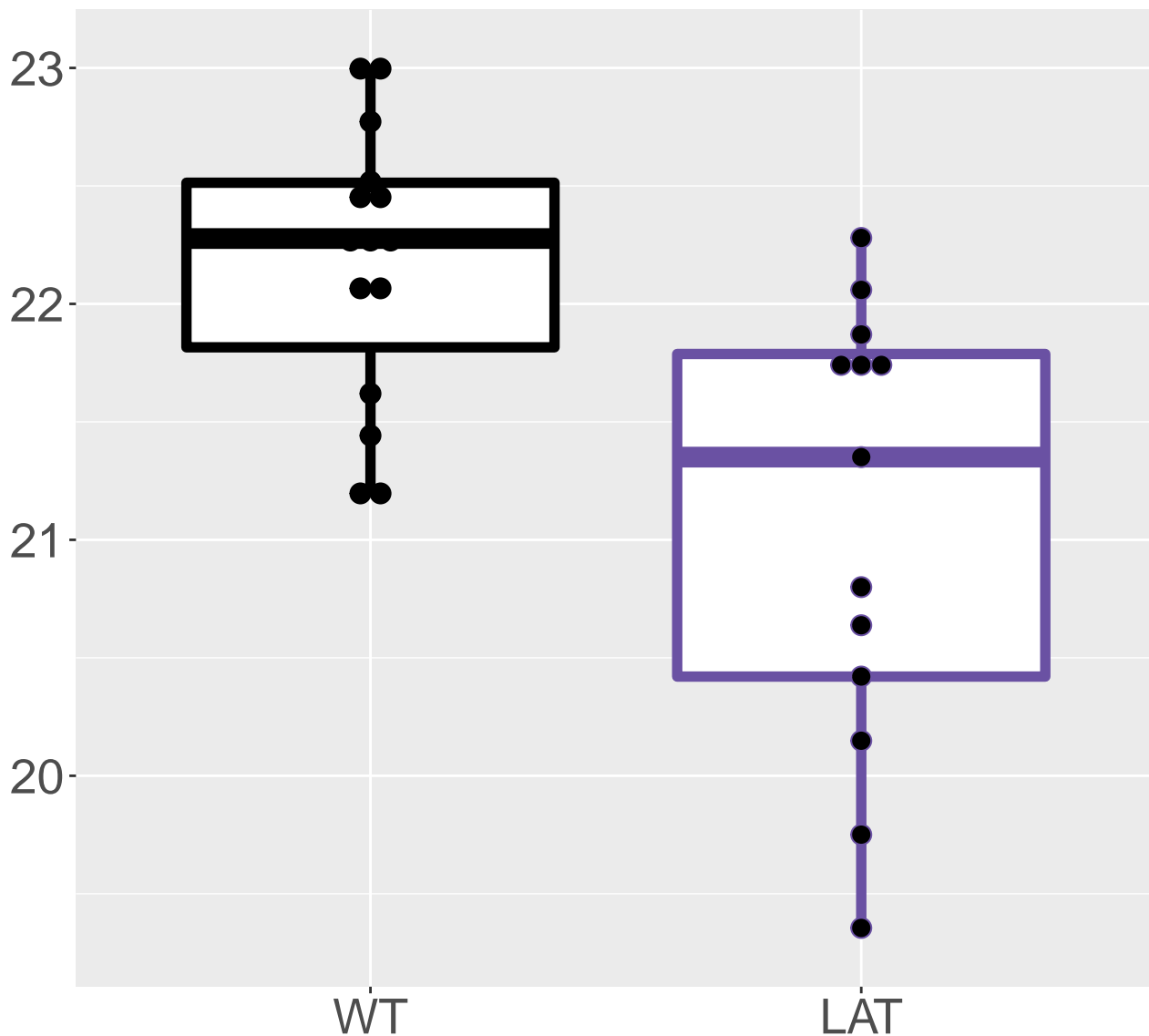


**M709.1127T598.89**  
**FDR = 0.0028, FC = 0.9**



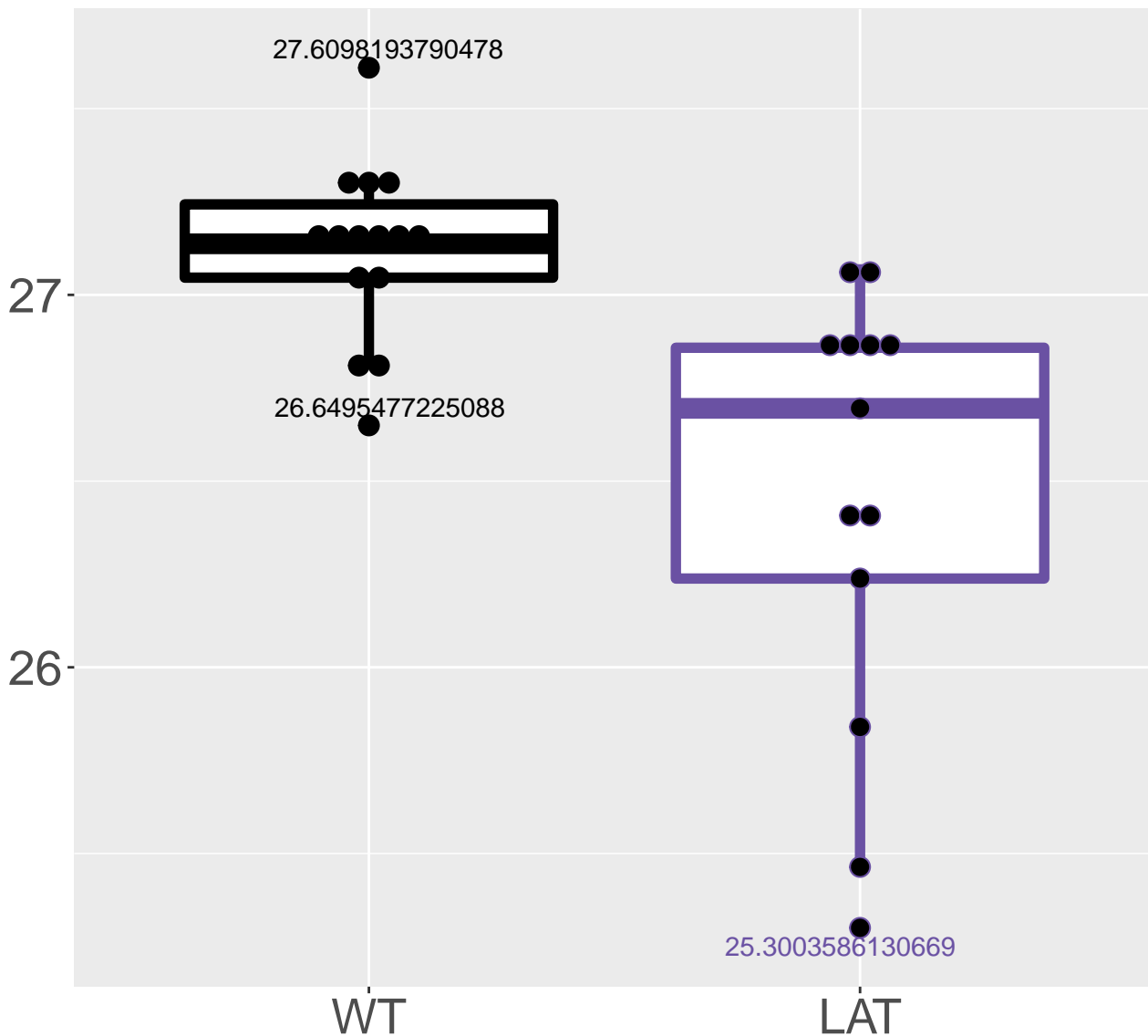


**M271.07T264.37**  
**FDR = 0.0028, FC = -1.1**



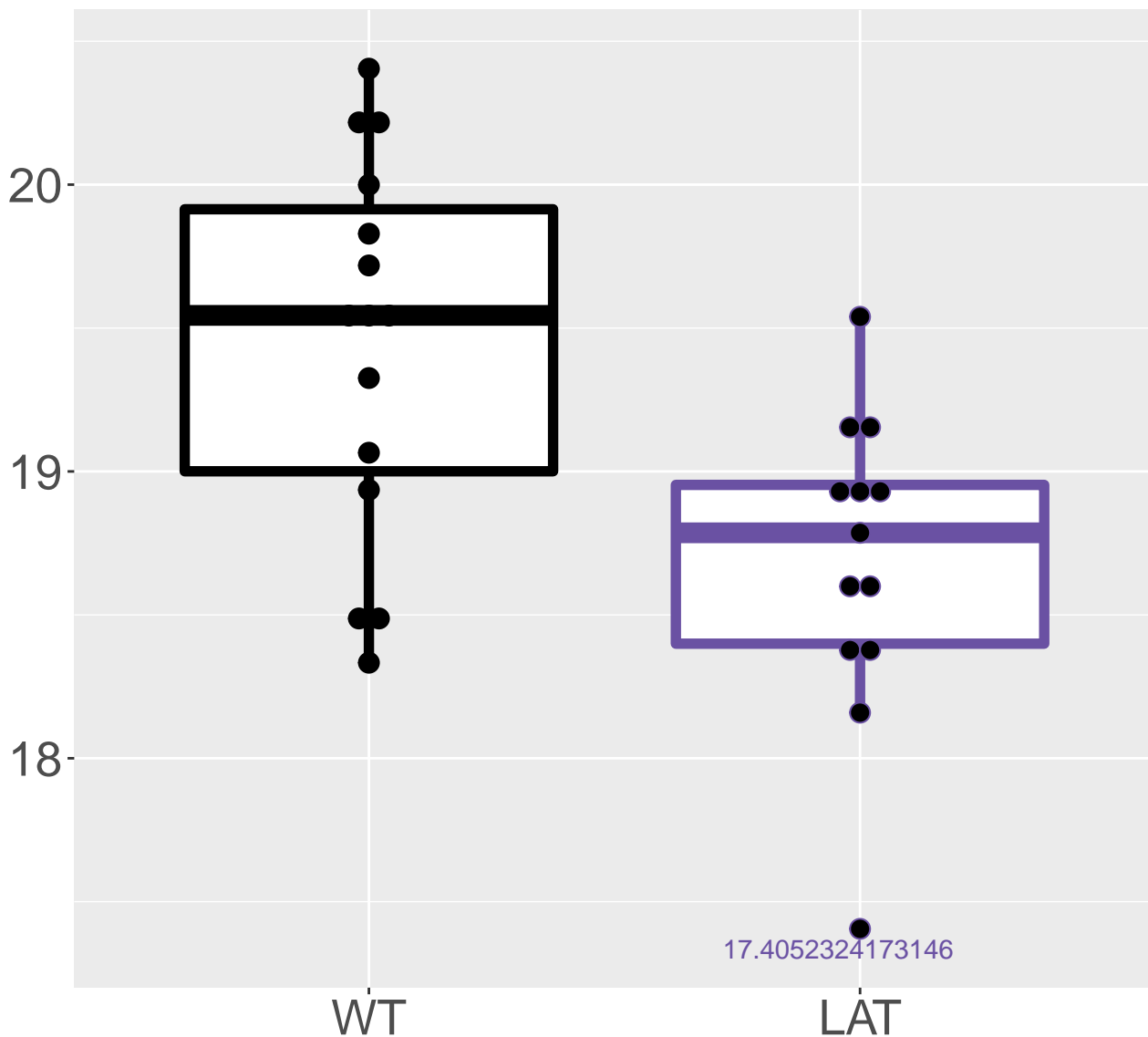
# Hypoxanthine;6-Oxopurine

FDR = 0.0028, FC = -0.66



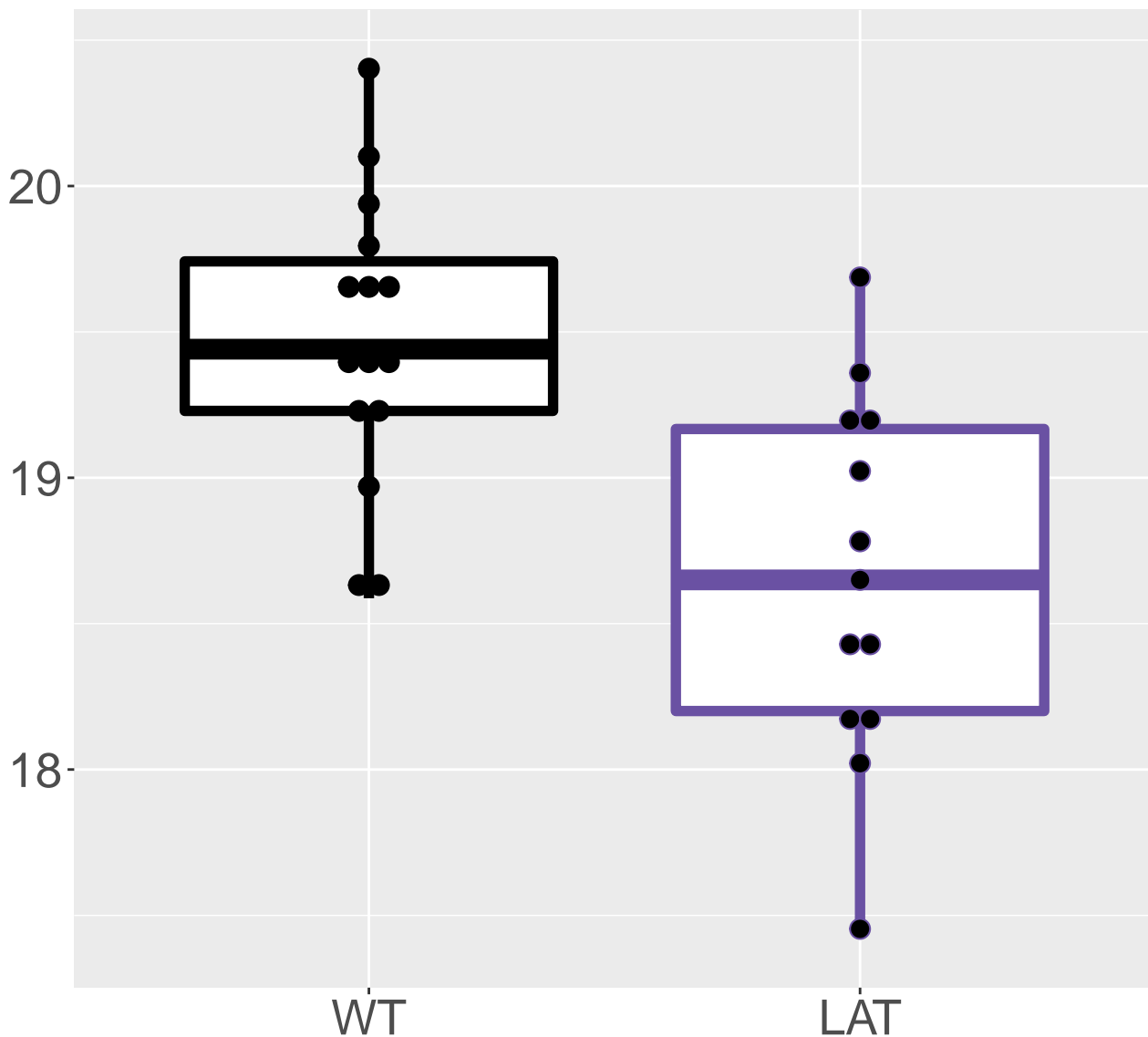
**M533.4581T78.49**

**FDR = 0.0029, FC = -0.76**



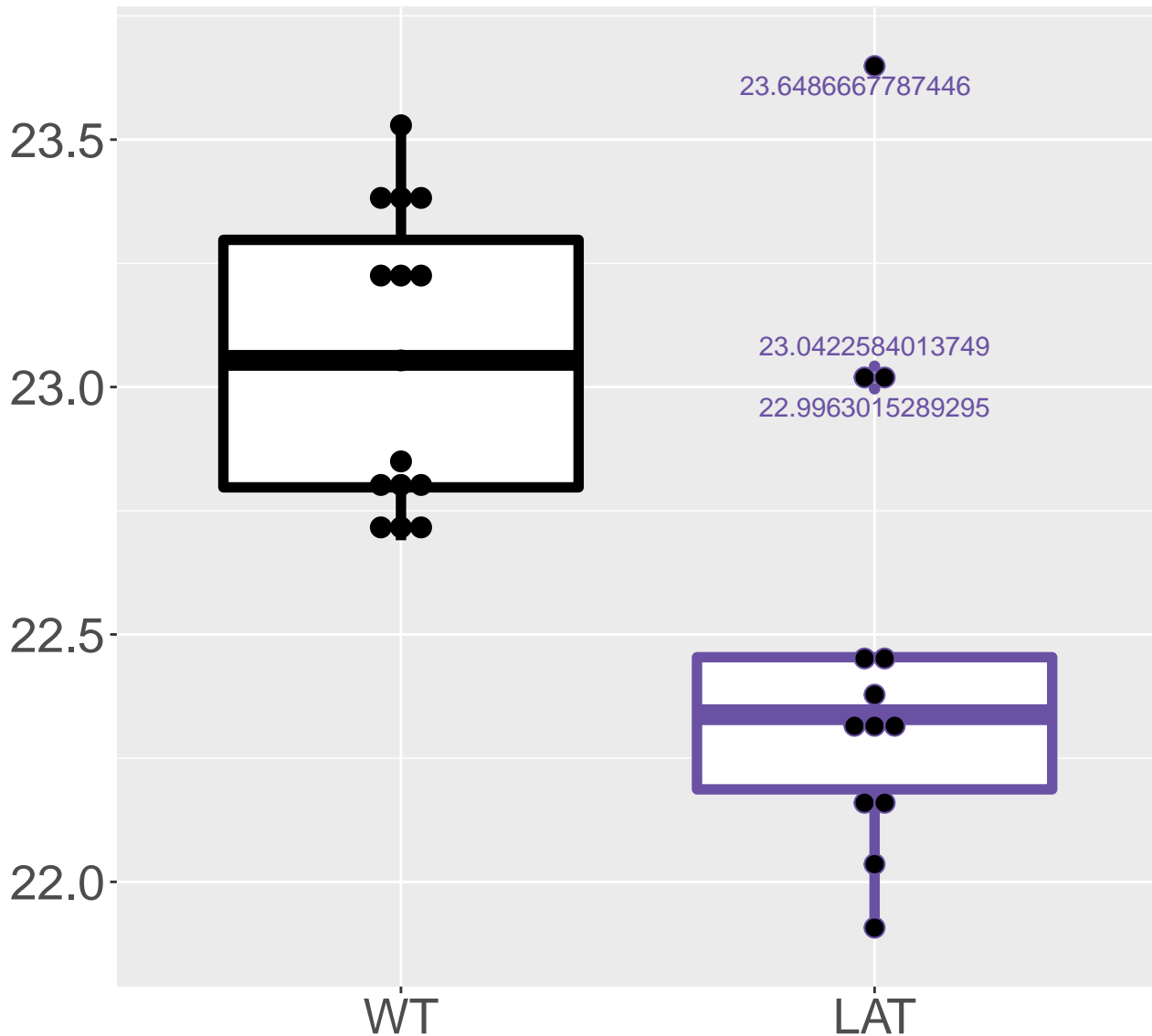
**M570.1941T233.37**

**FDR = 0.0029, FC = -0.81**



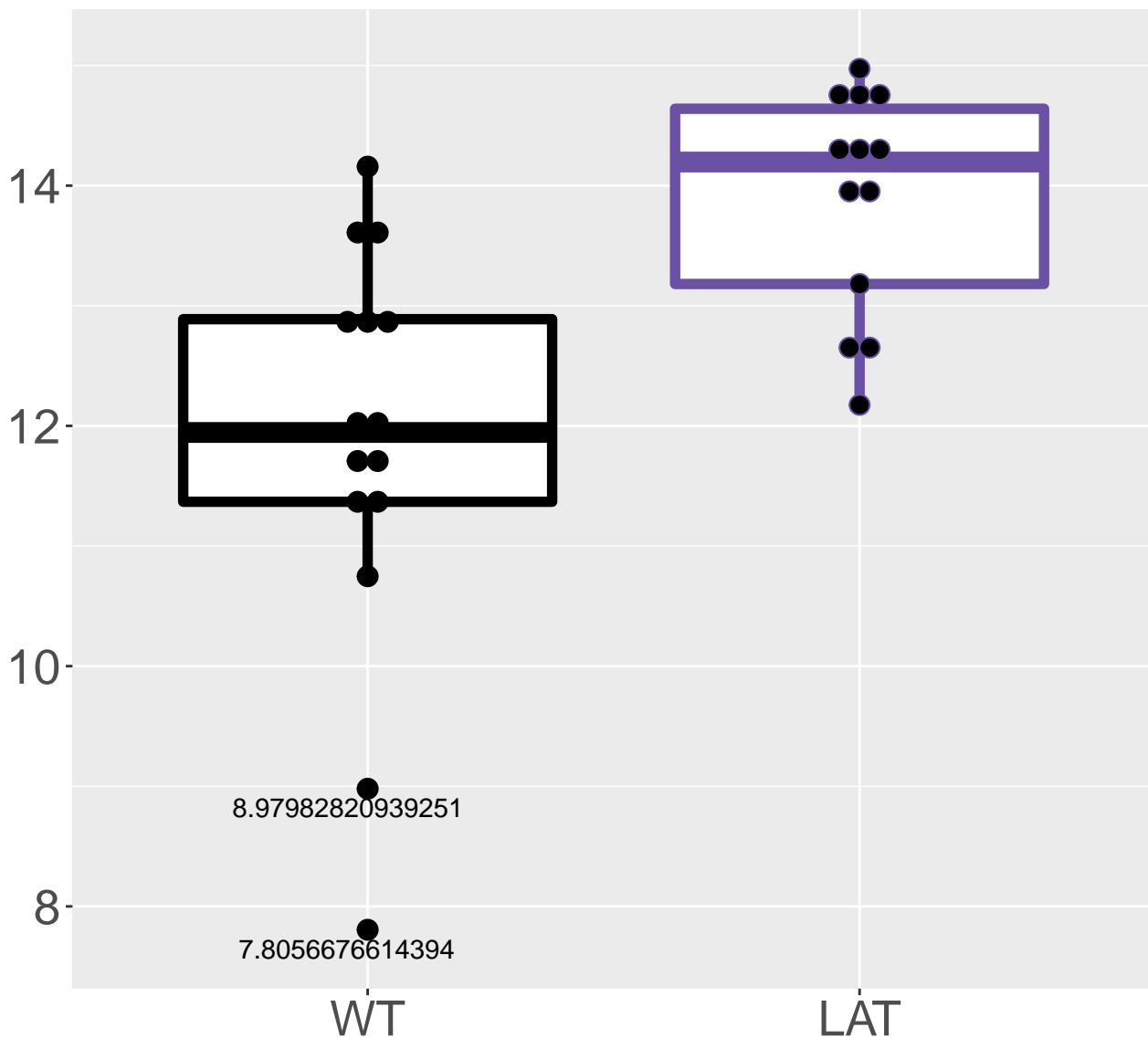
**M342.1127T537.13**

**FDR = 0.0029, FC = -0.58**



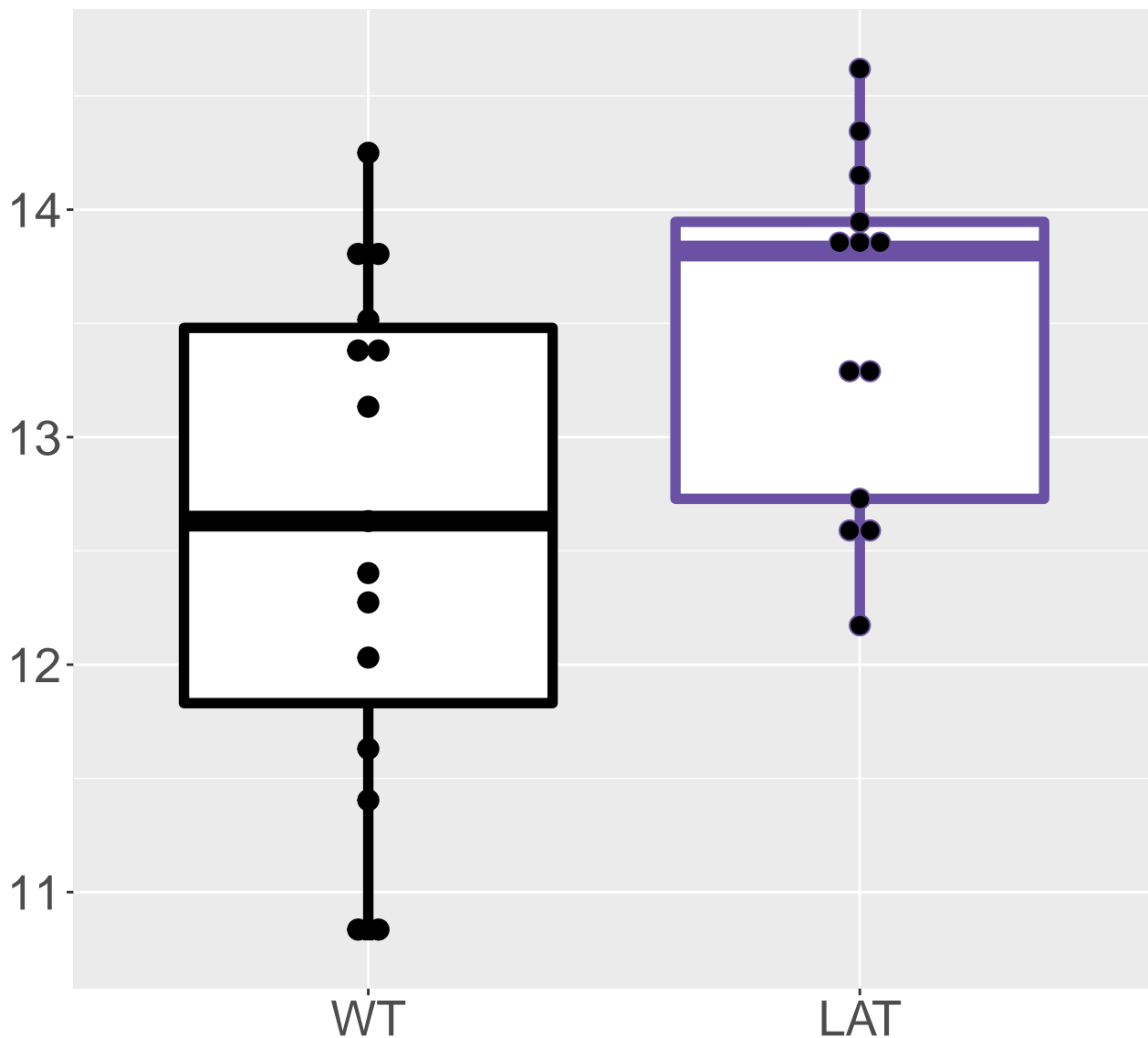
**M159.9856T625.28**

**FDR = 0.003, FC = 2**

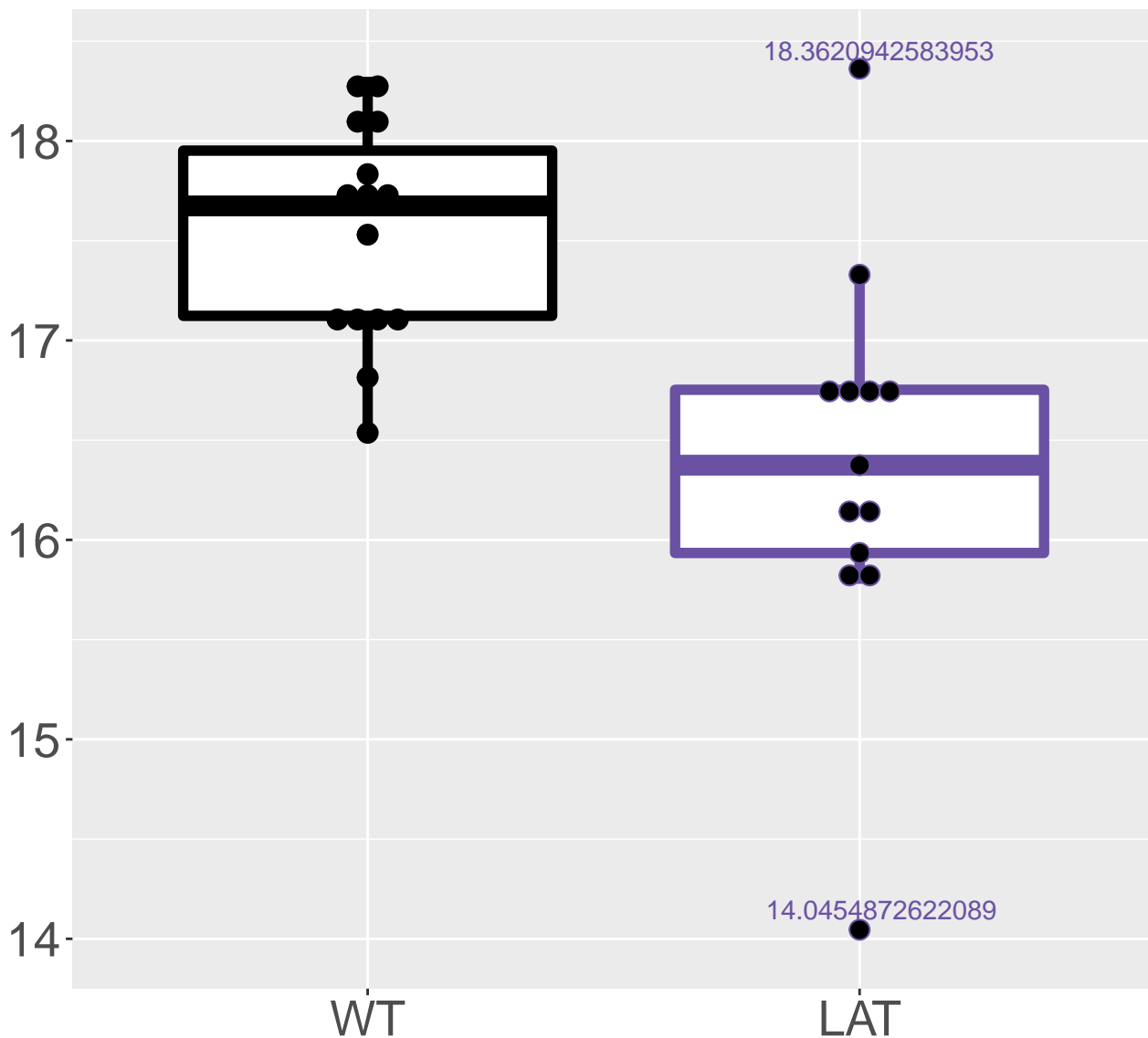


**M283.0499T624.64**

**FDR = 0.003, FC = 0.86, sex\*\*\***



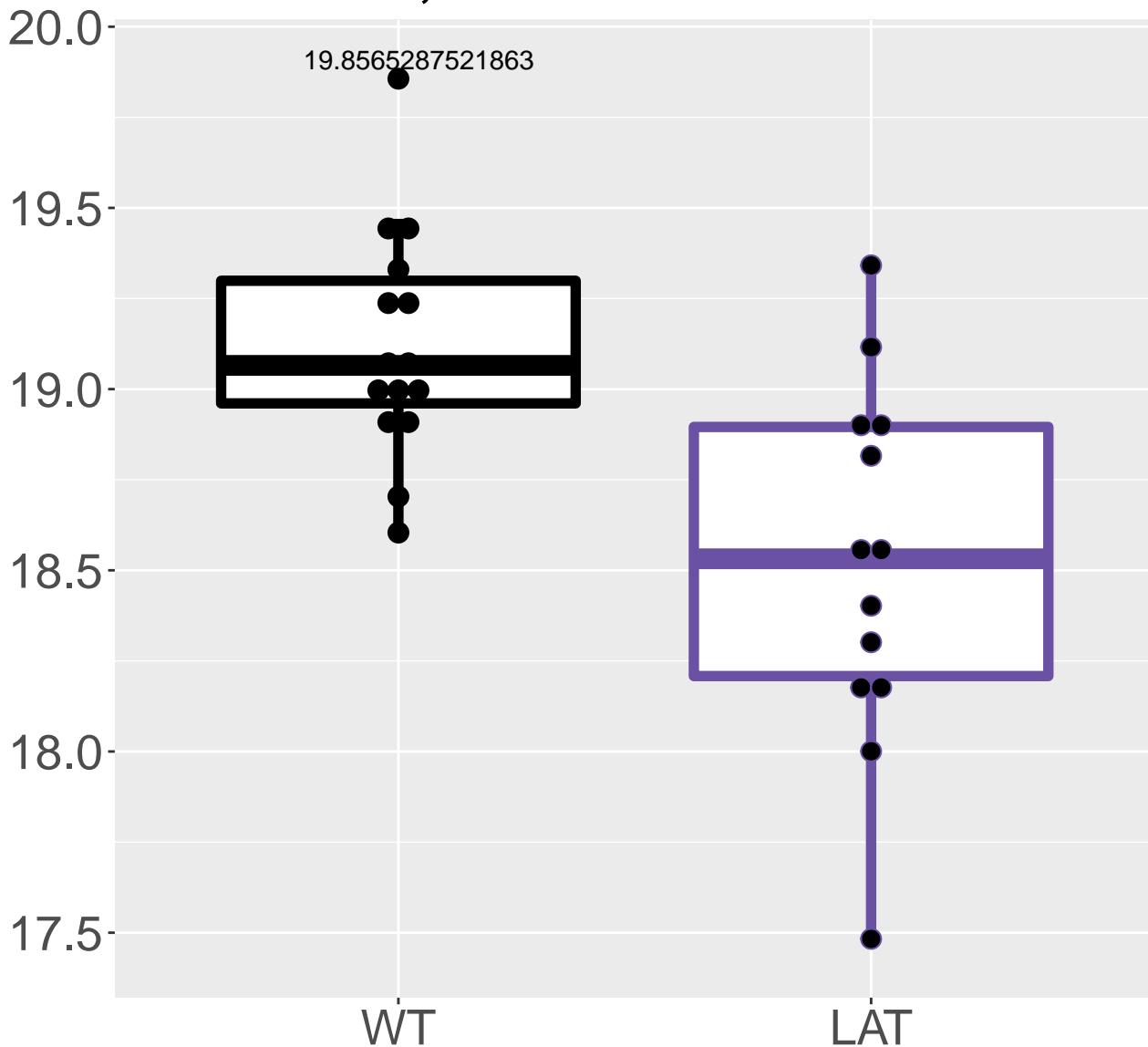
**M362.6125T606.77\_1**  
**FDR = 0.003, FC = -1.2**



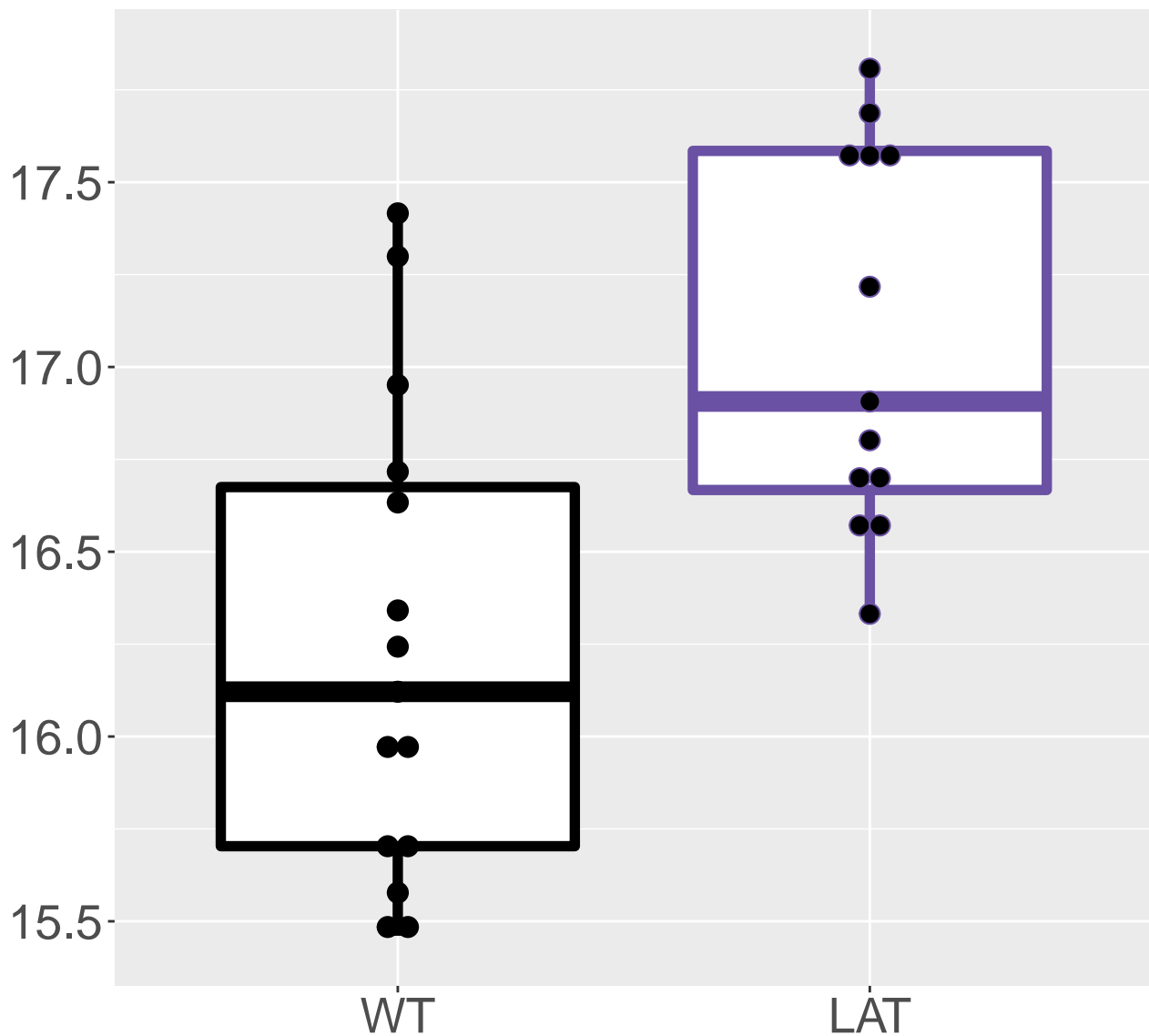


**M733.0172T548.33**

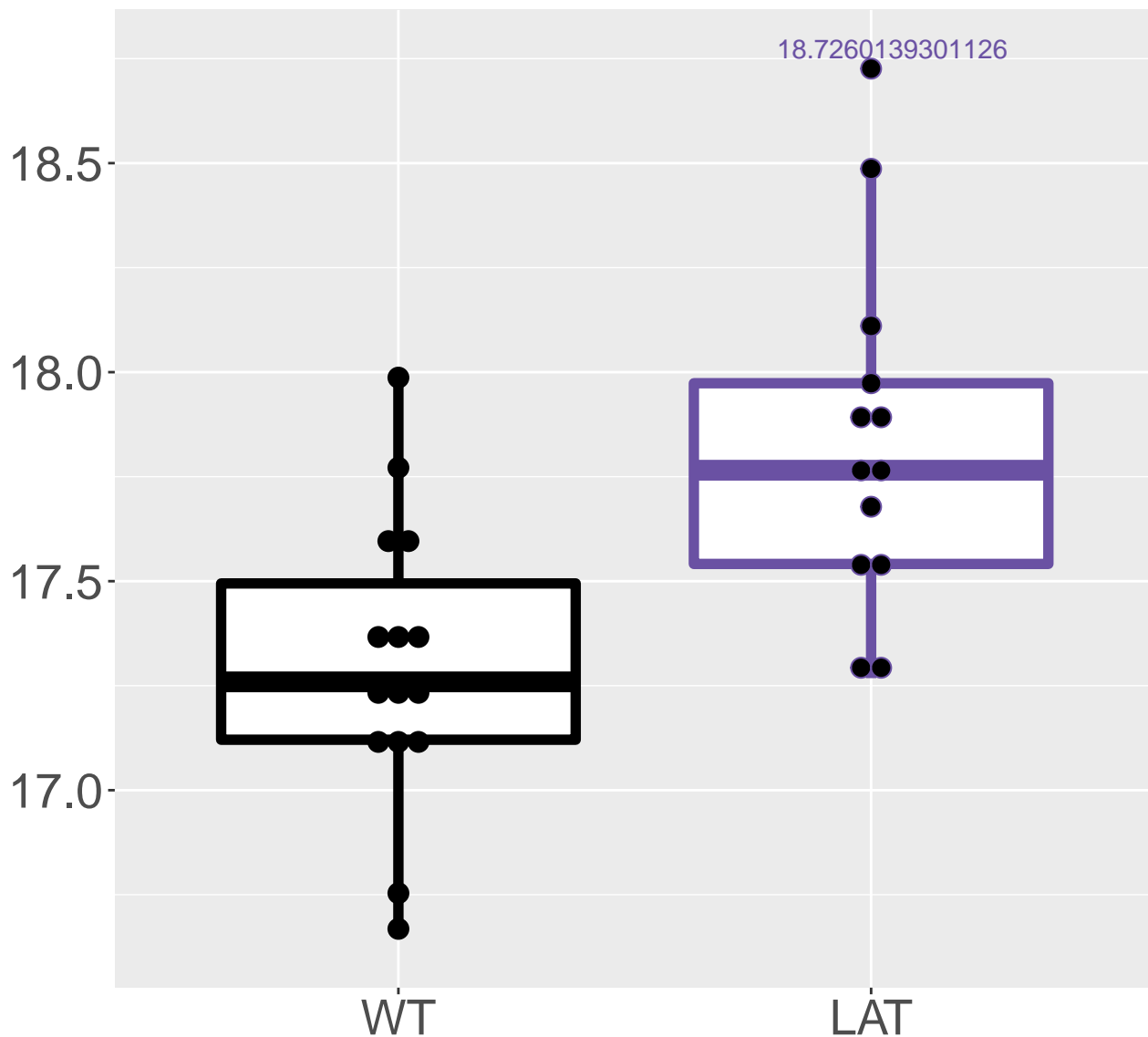
**FDR = 0.0032, FC = -0.6**



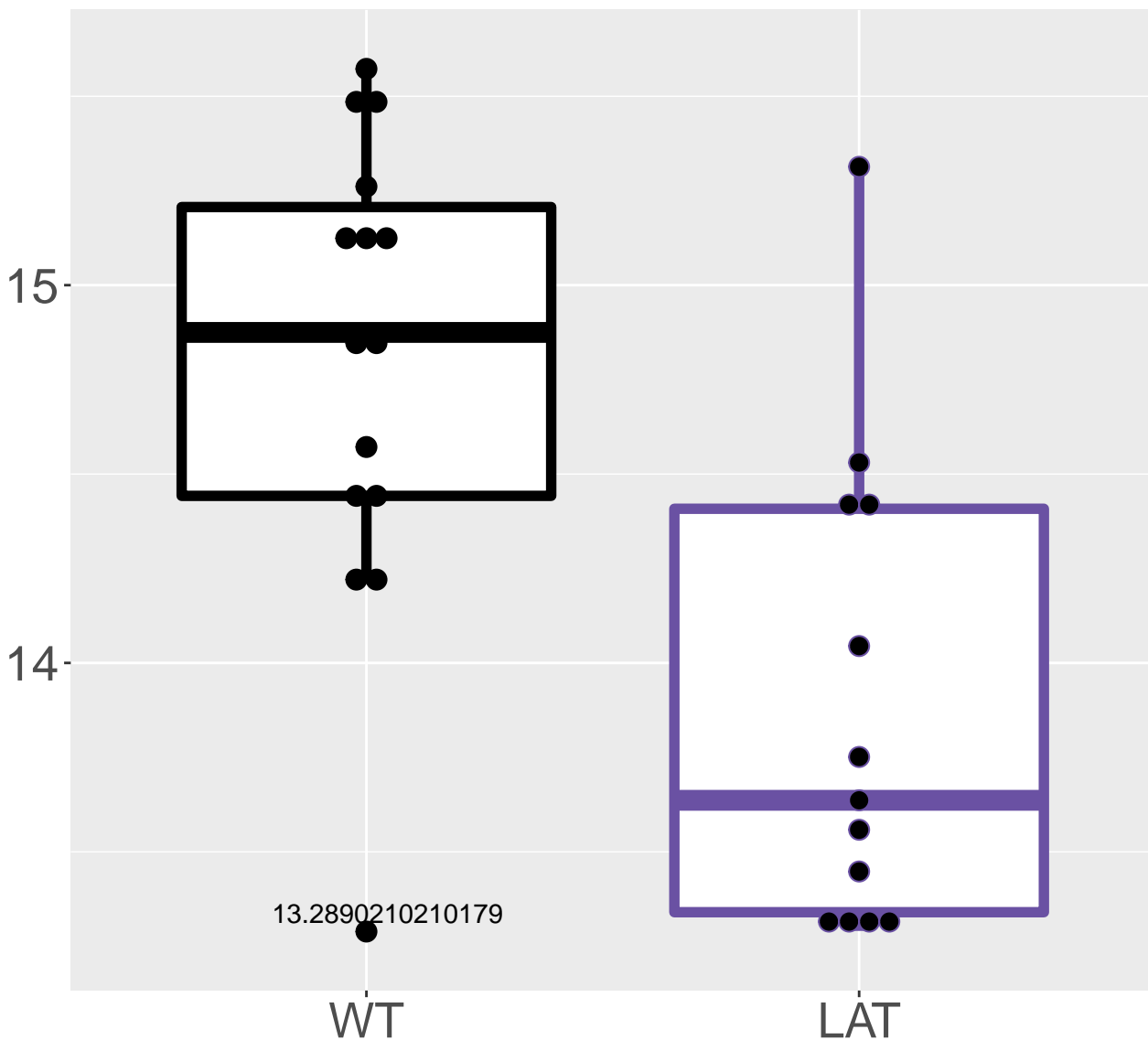
**Suberic acid**  
**FDR = 0.0033, FC = 0.84**



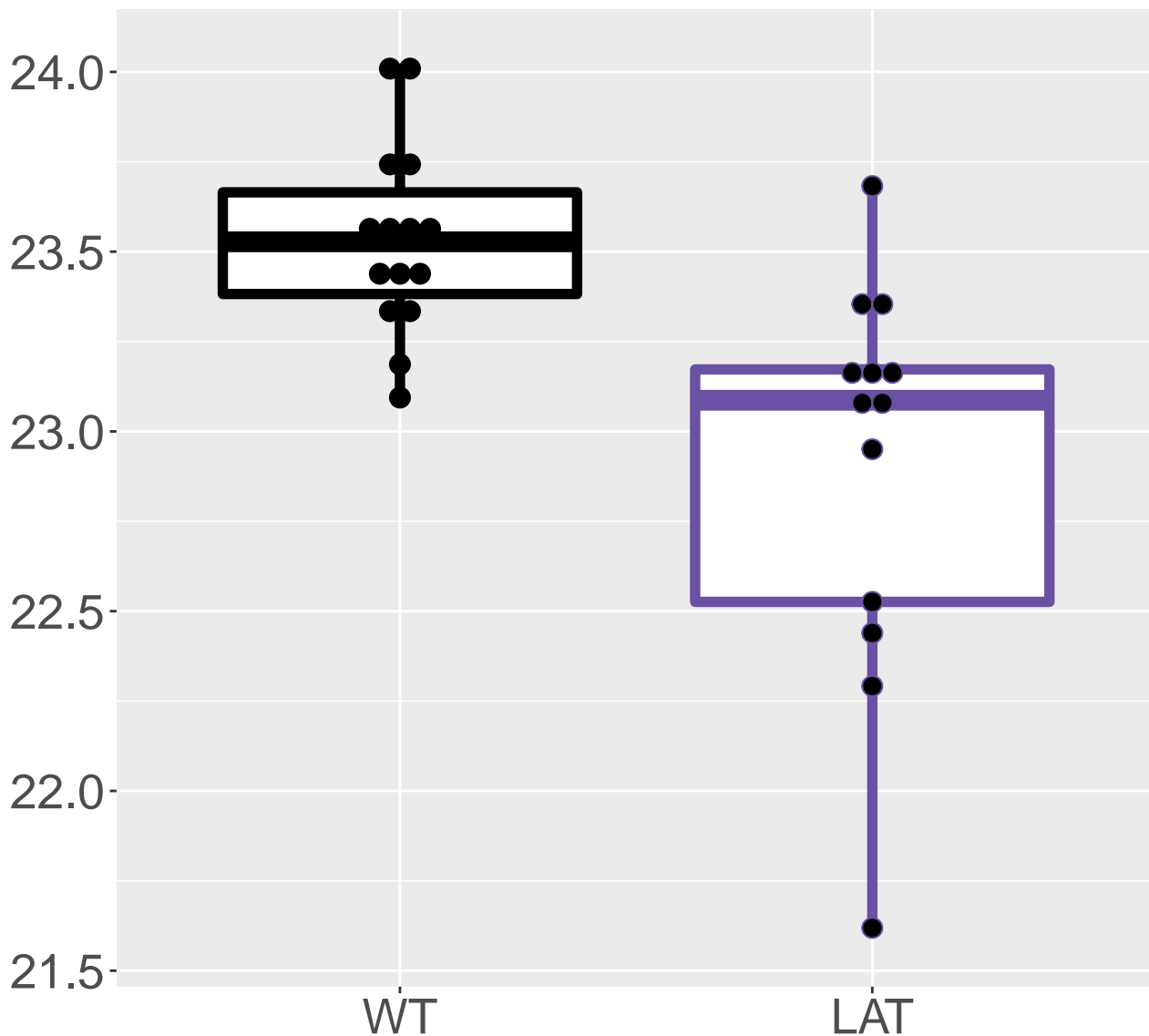
**ATP;Adenosine 5'- triphosphate;Adenosine tr**  
**FDR = 0.0033, FC = 0.55**



**FDR = 0.0033, FC = -0.93**

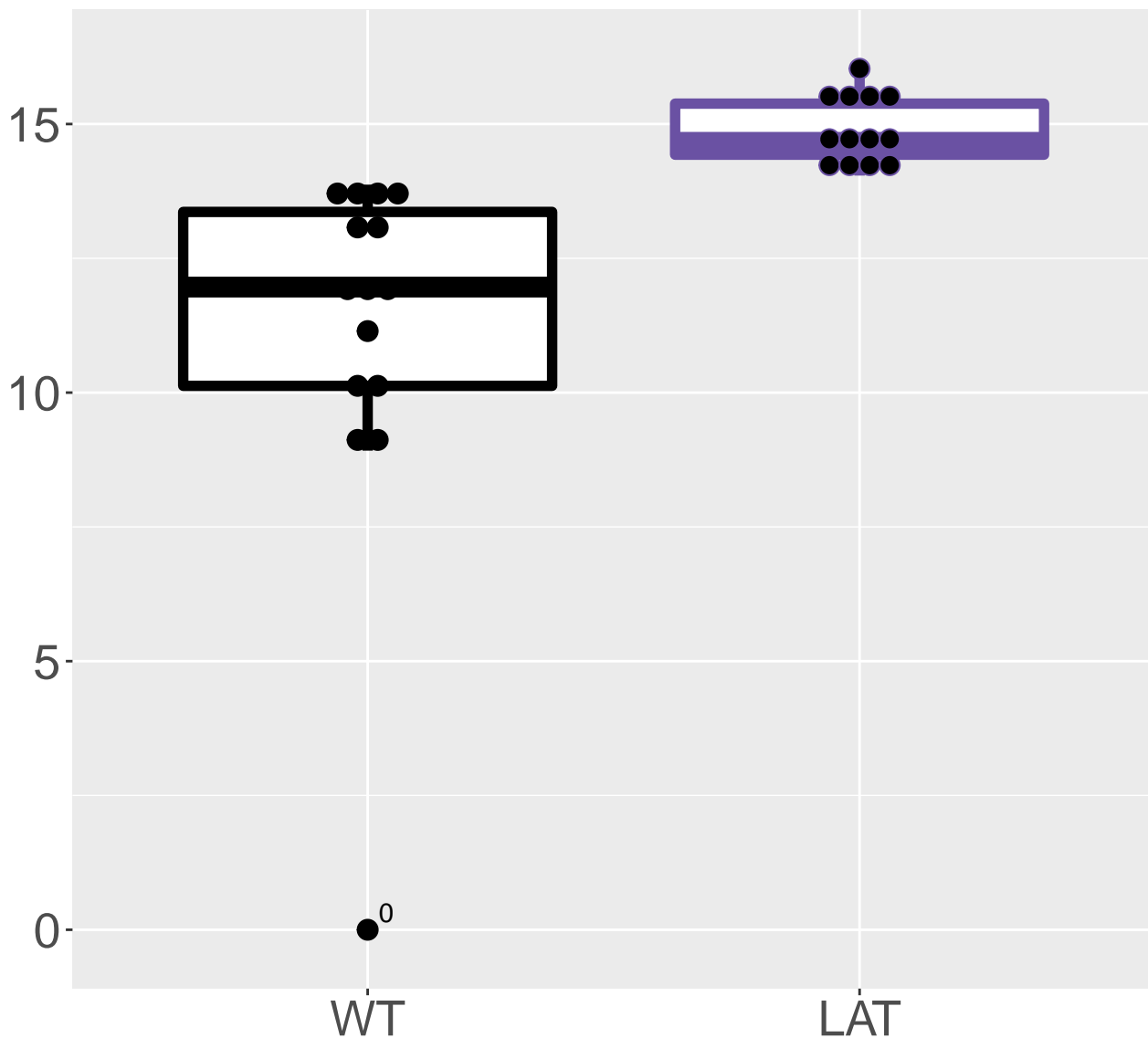


**N-Acetyl-DL-serine|O-Acetyl-L-serine**  
**FDR = 0.0034, FC = -0.62**

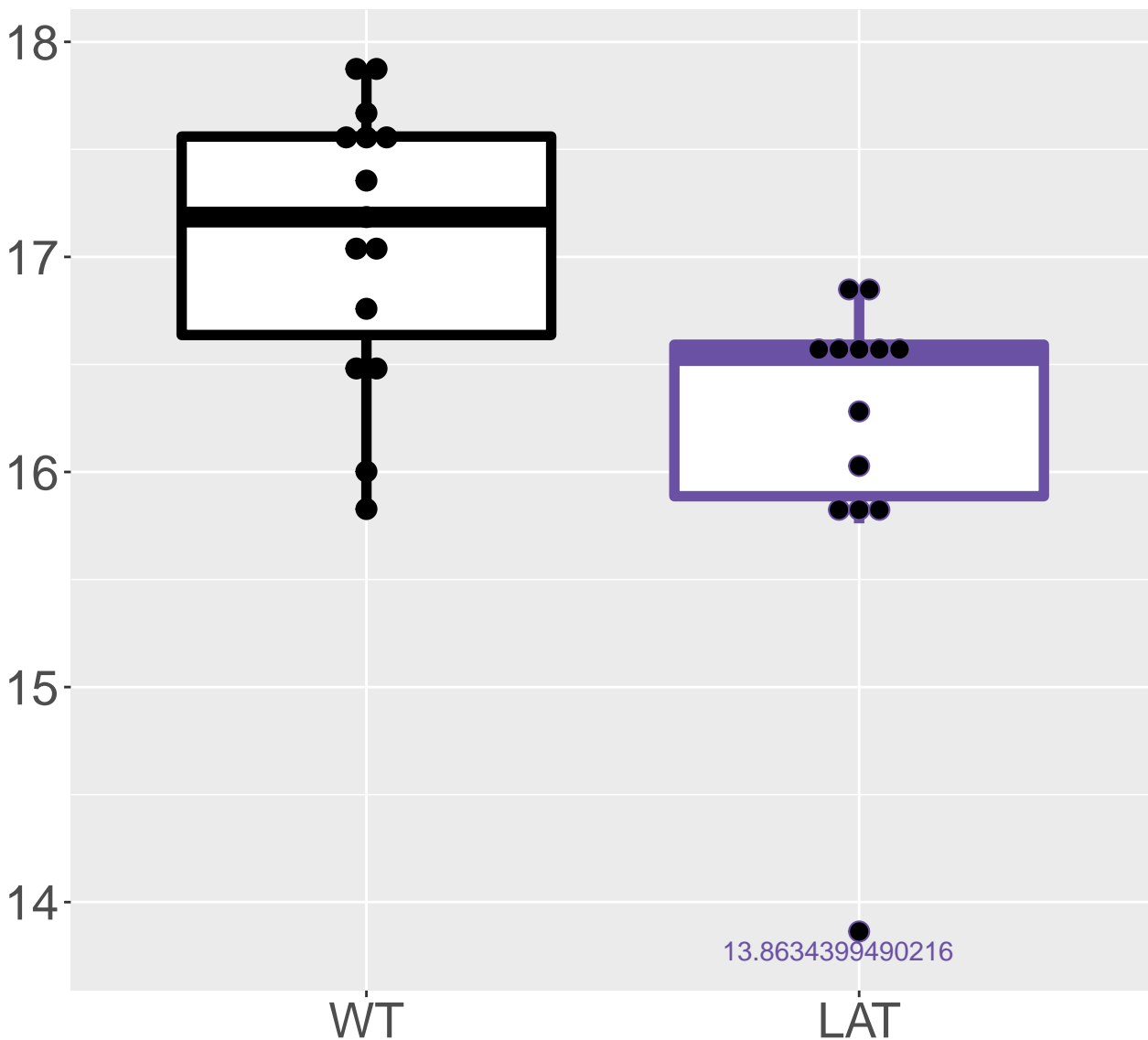


**M666.2065T370.35**

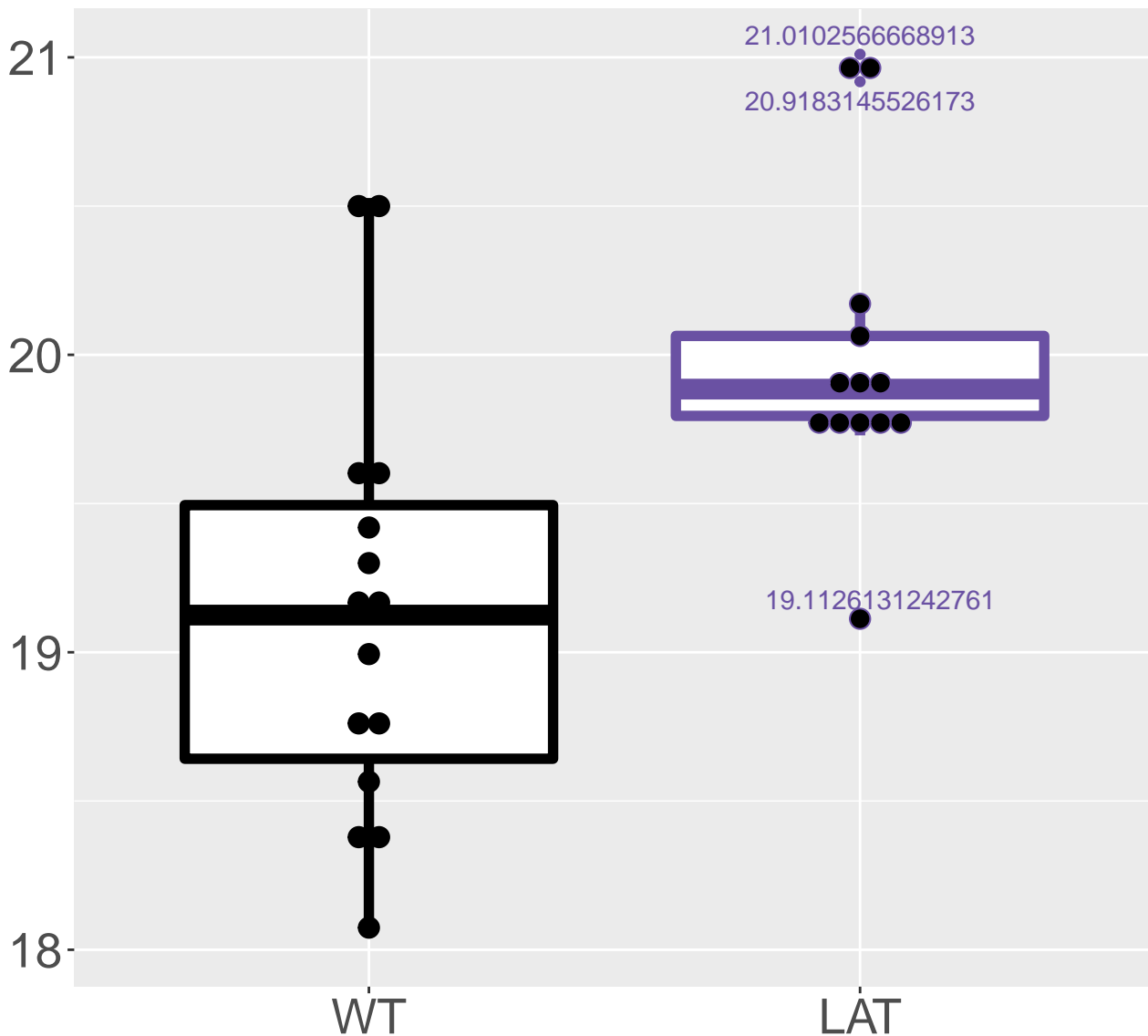
**FDR = 0.0034, FC = 3.8**



**M558.4611T78.21**  
**FDR = 0.0034, FC = -0.91**

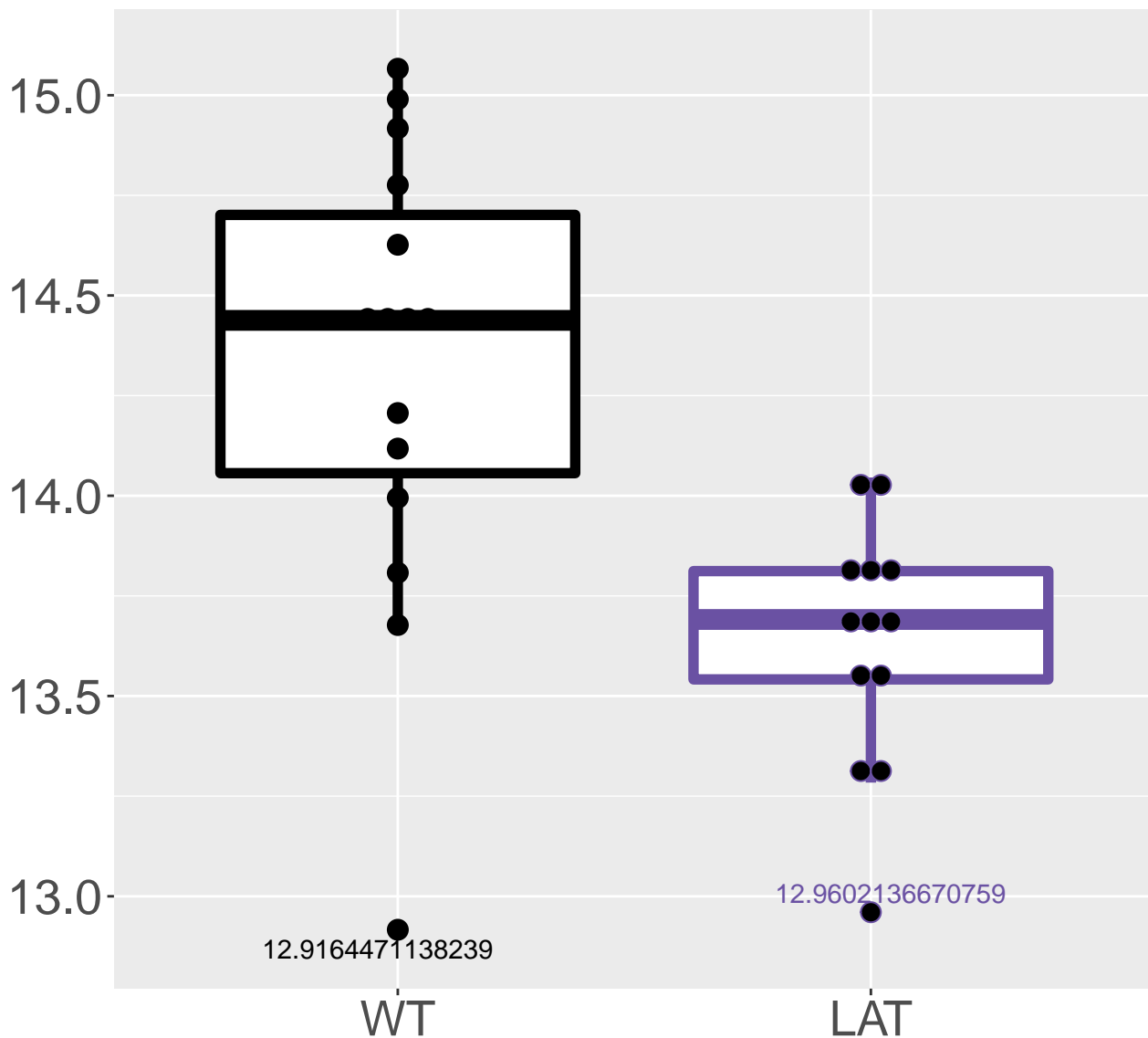


**M716.2288T316.71**  
**FDR = 0.0035, FC = 0.85**



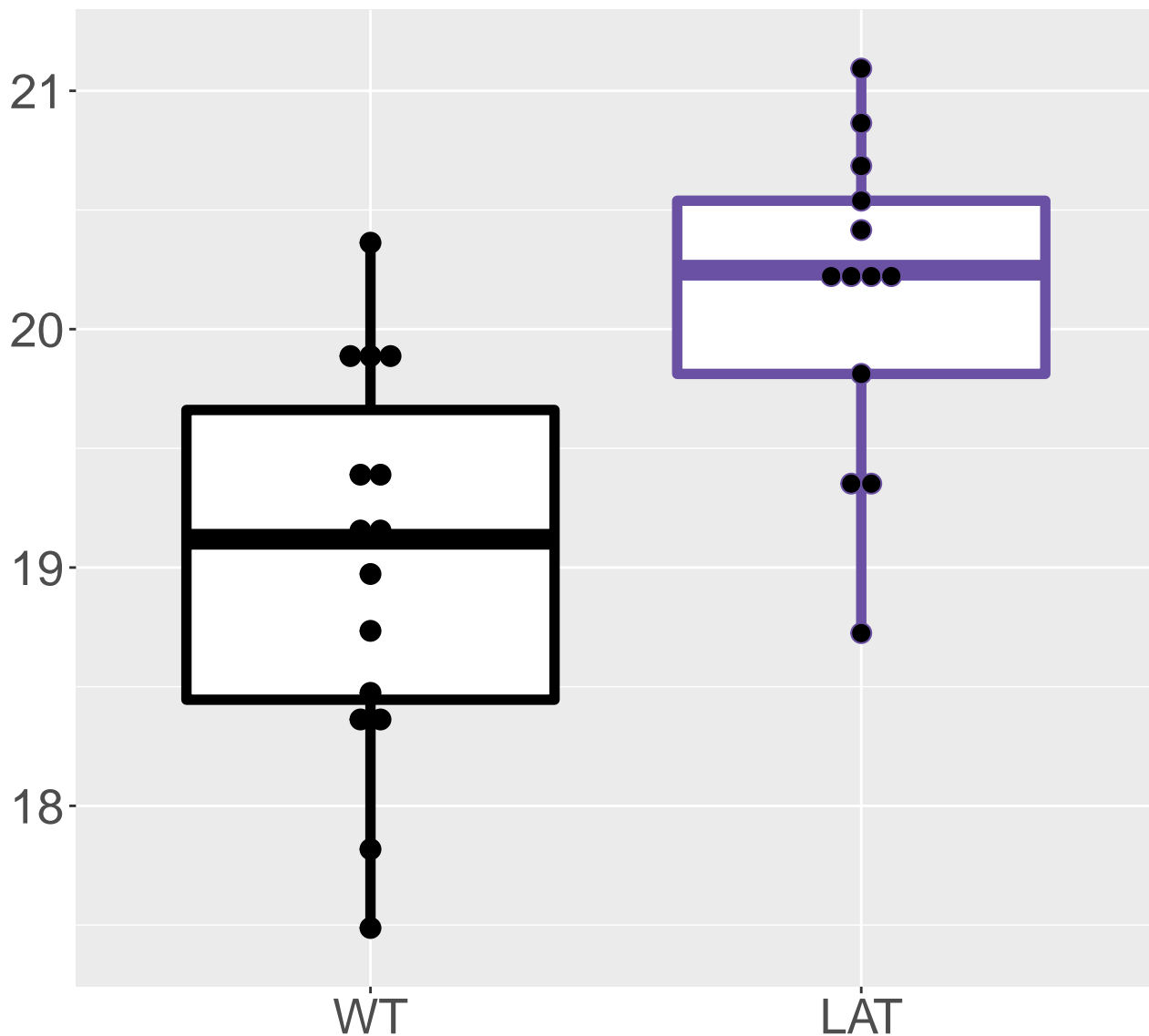


**M877.2618T626.89\_2**  
**FDR = 0.0035, FC = -0.69**



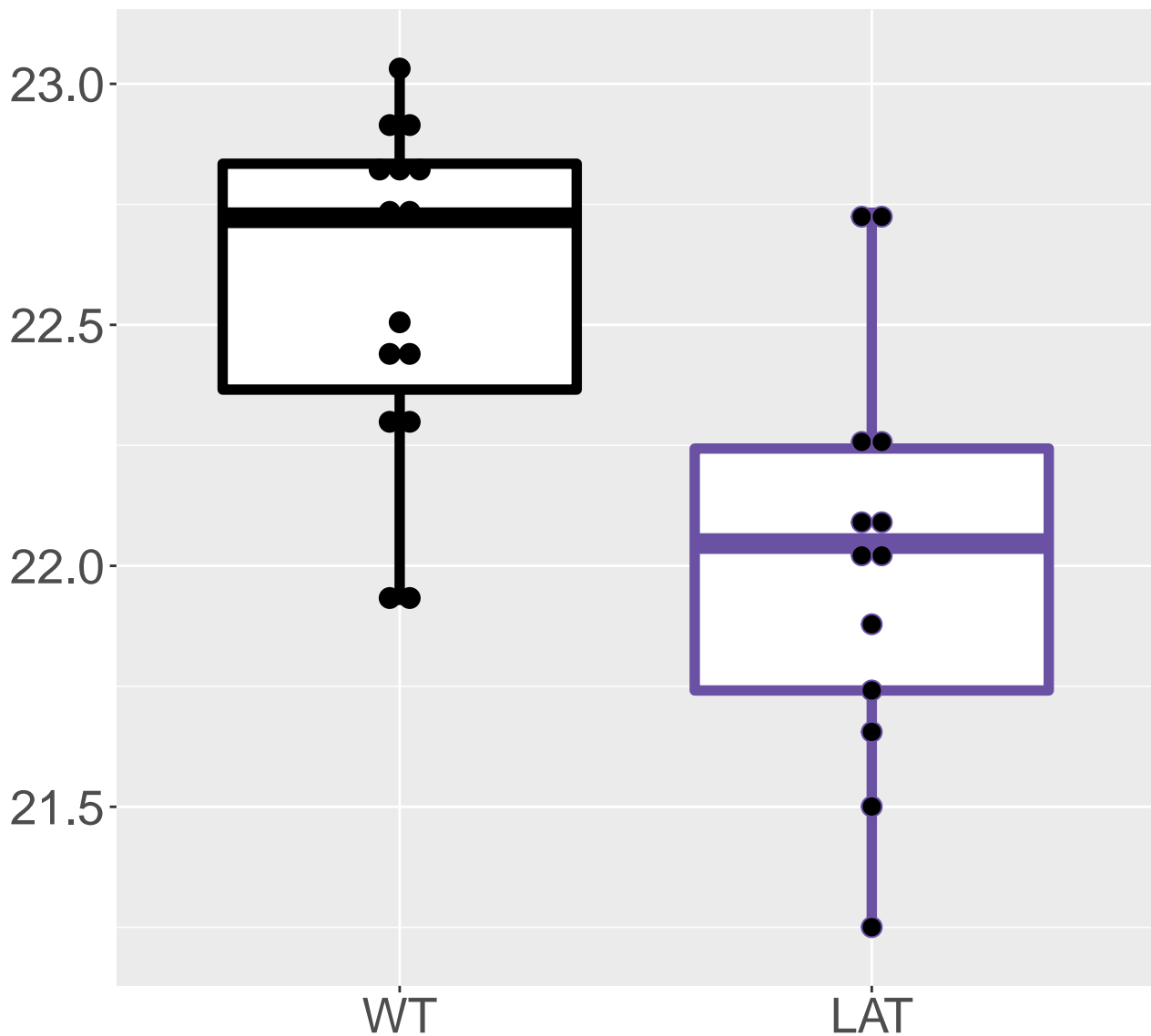
**M356.3878T589.52**

**FDR = 0.0035, FC = 1.1**

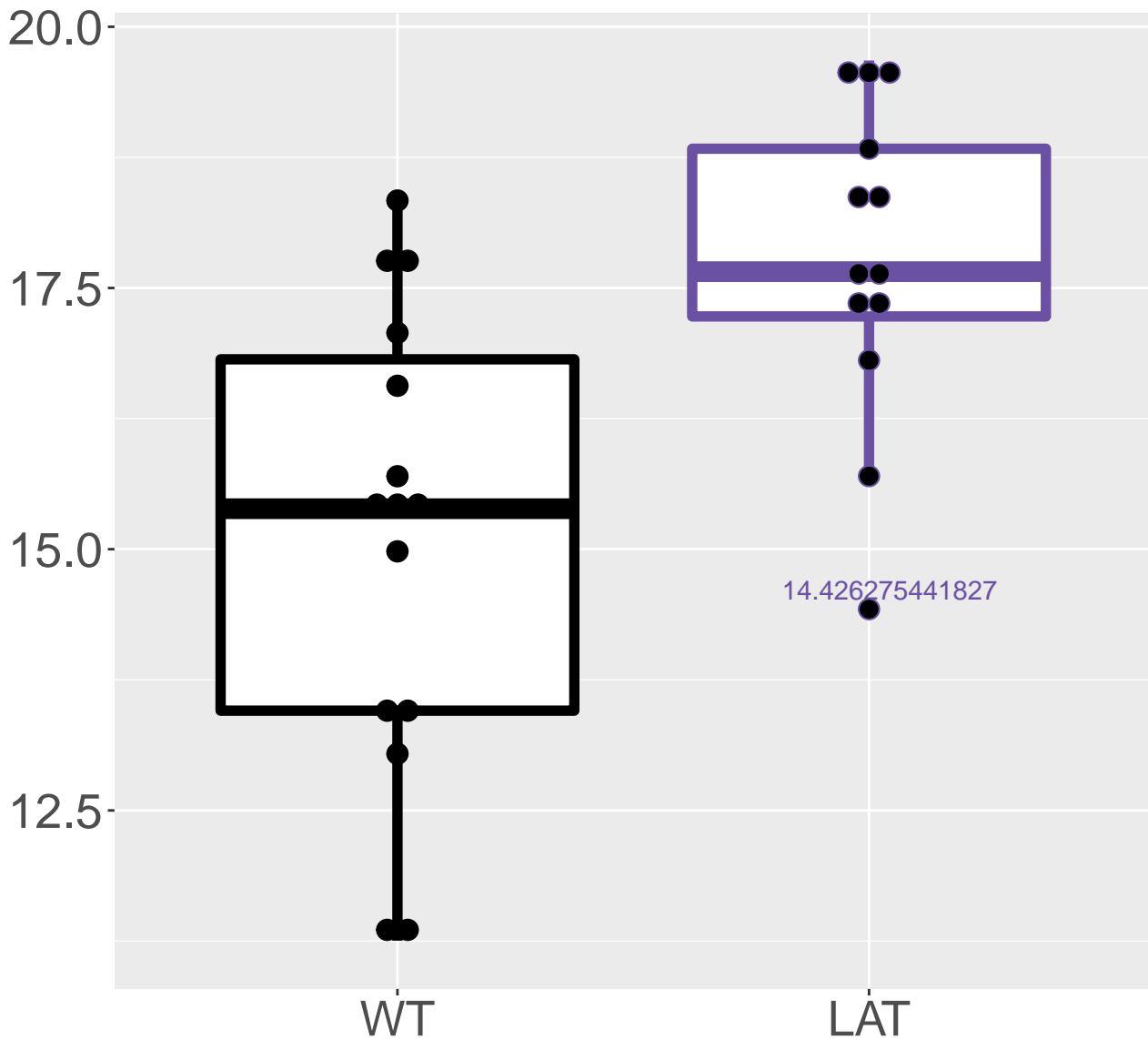


**M221.0668T537.17**

**FDR = 0.0035, FC = -0.56**

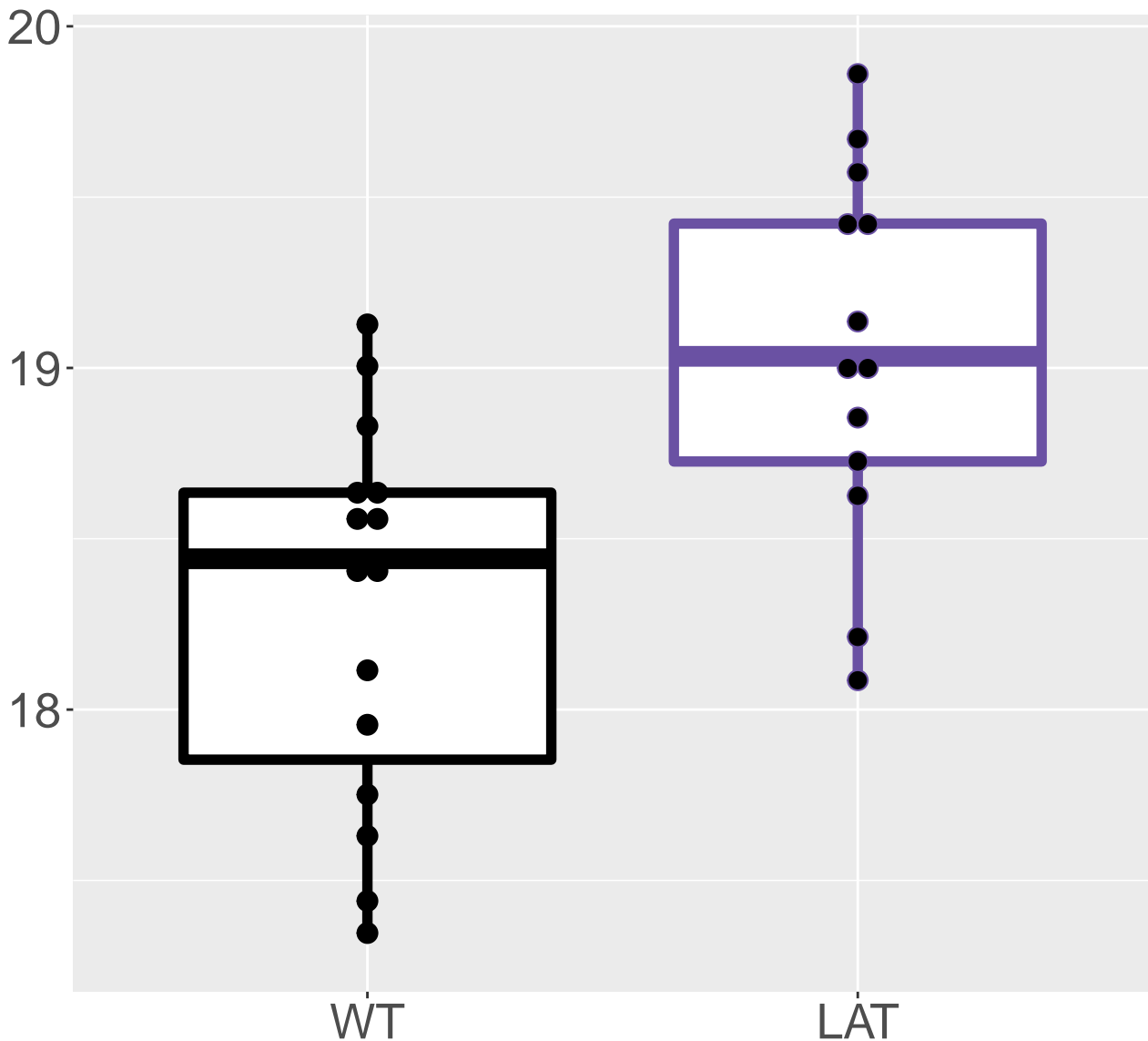


**Guanosine 5'-diphosphoglucose;GDP-glucose**  
**FDR = 0.0036, FC = 2.6**



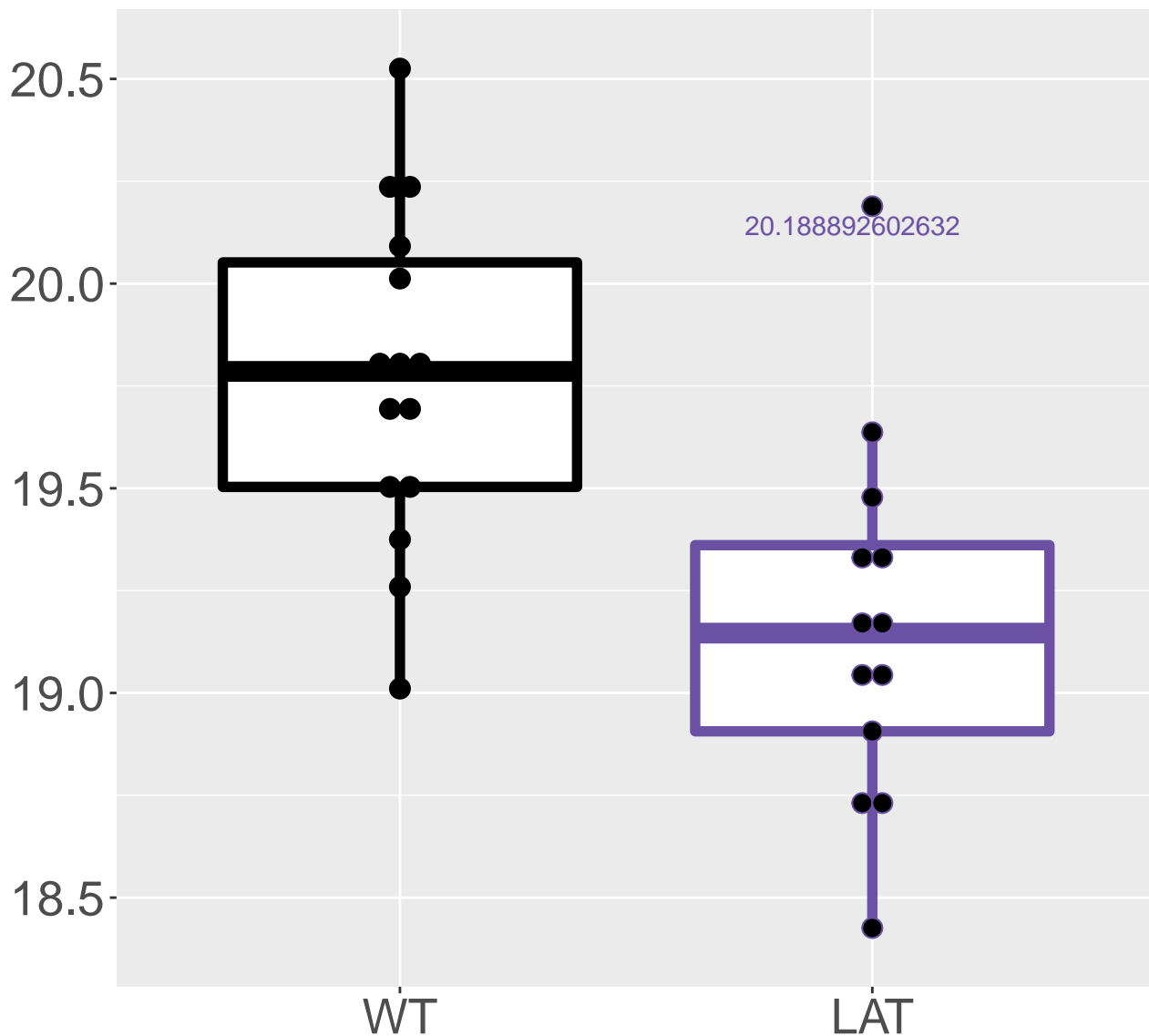
**M445.0538T564.41**

**FDR = 0.0036, FC = 0.75**

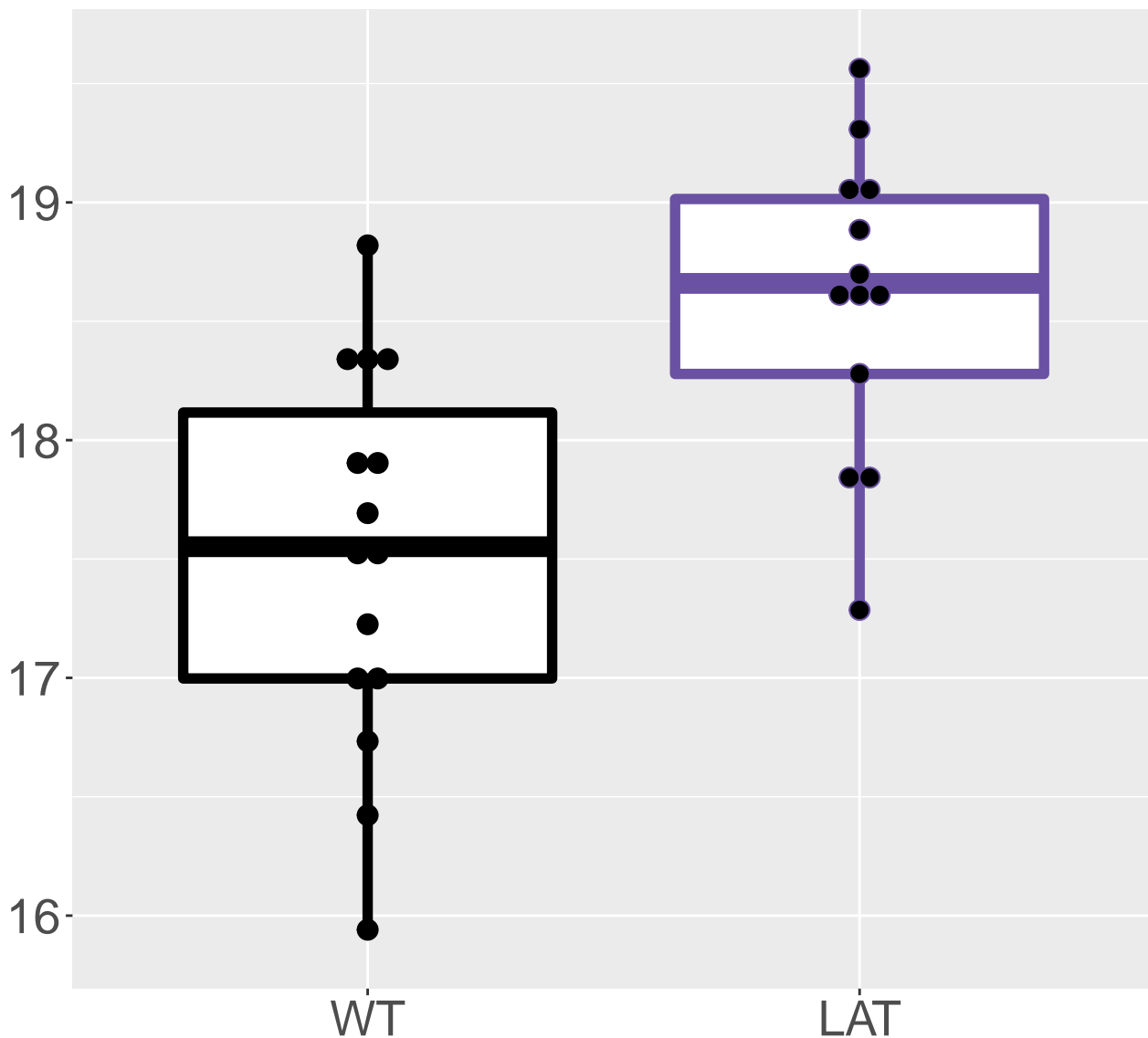


**M387.115T536.92**

**FDR = 0.0036, FC = -0.6**

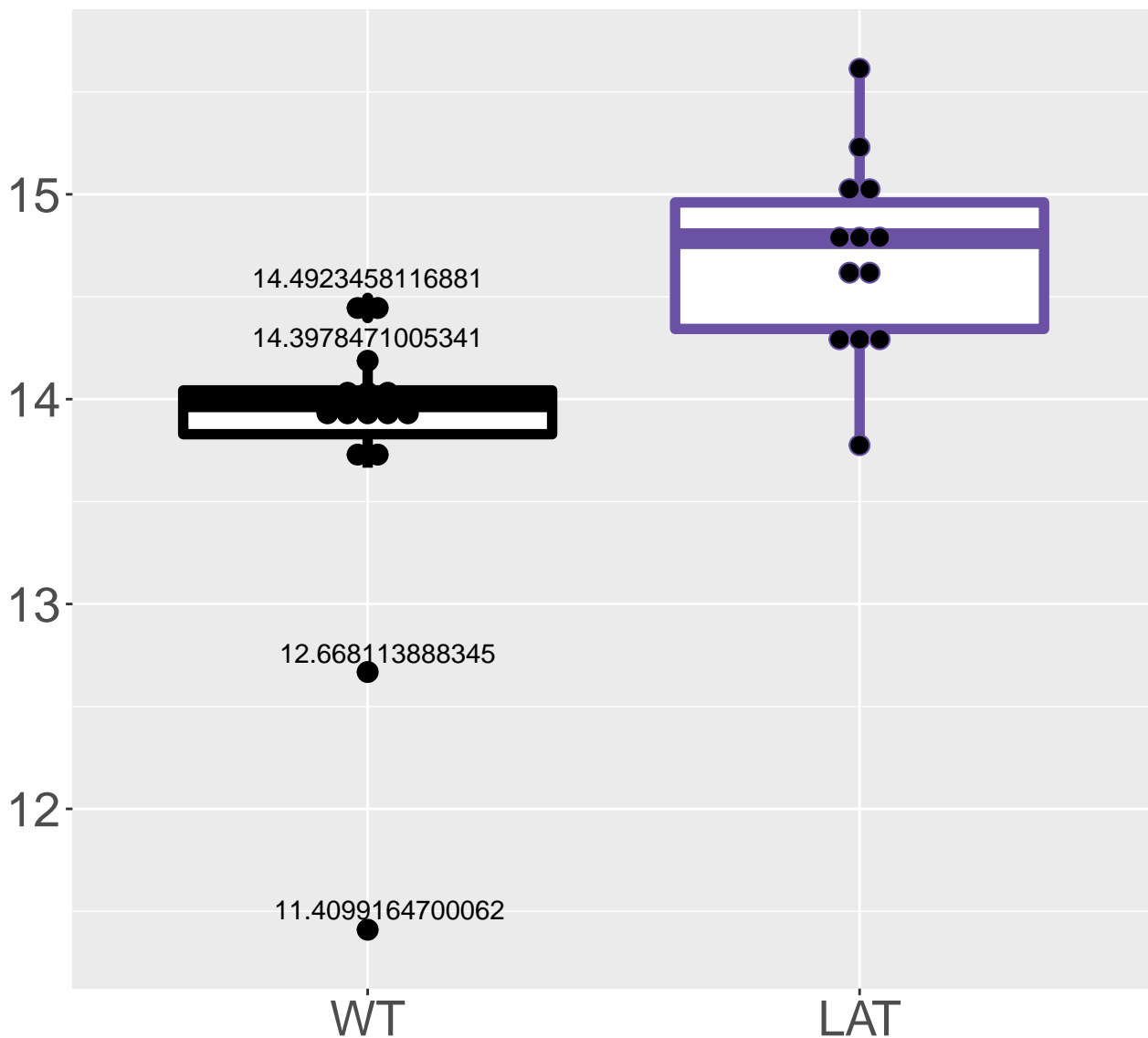


**M356.7222T589.57\_1**  
**FDR = 0.0036, FC = 1.1**



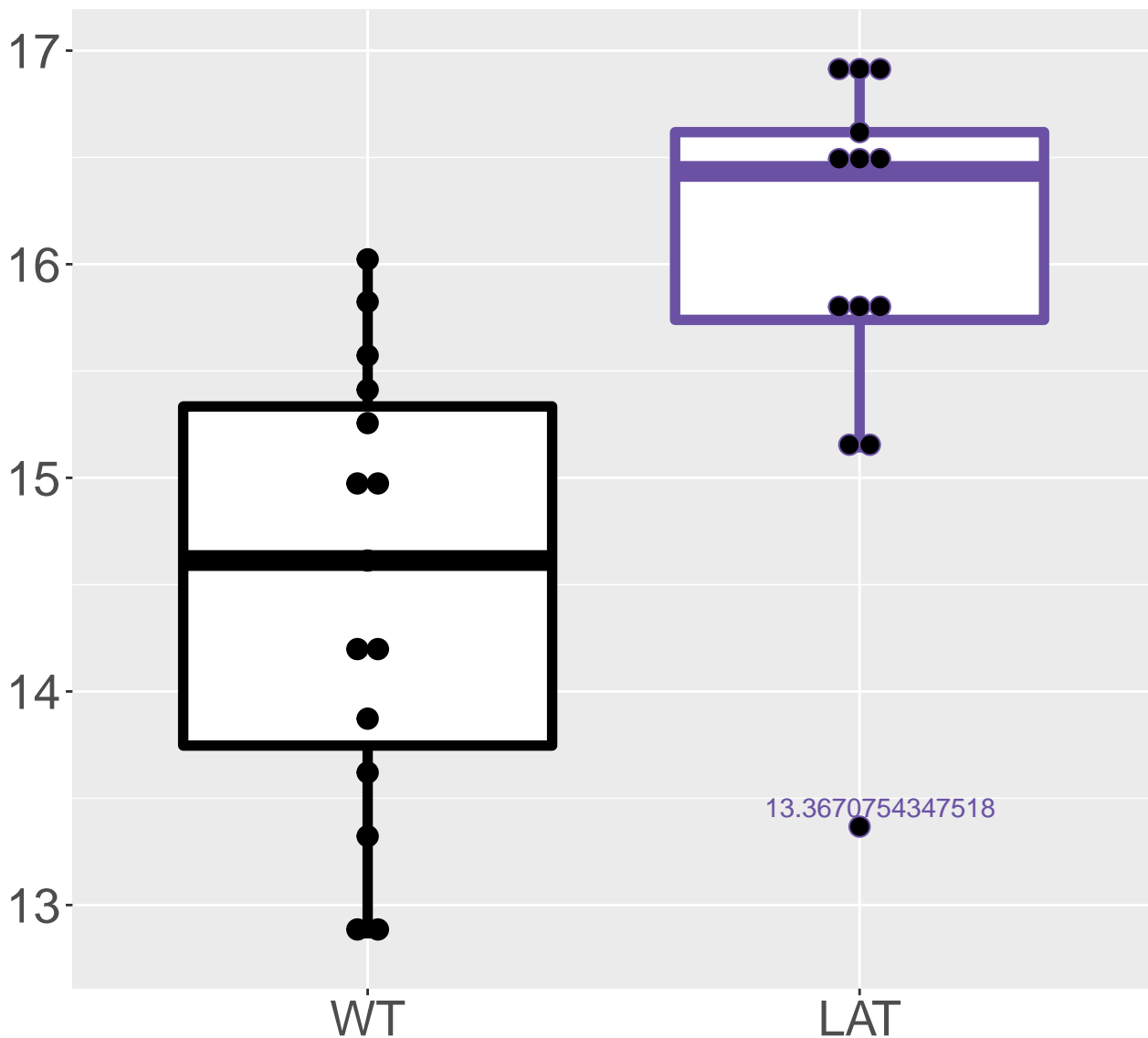
**M462.1154T513.09**

**FDR = 0.0037, FC = 0.94**



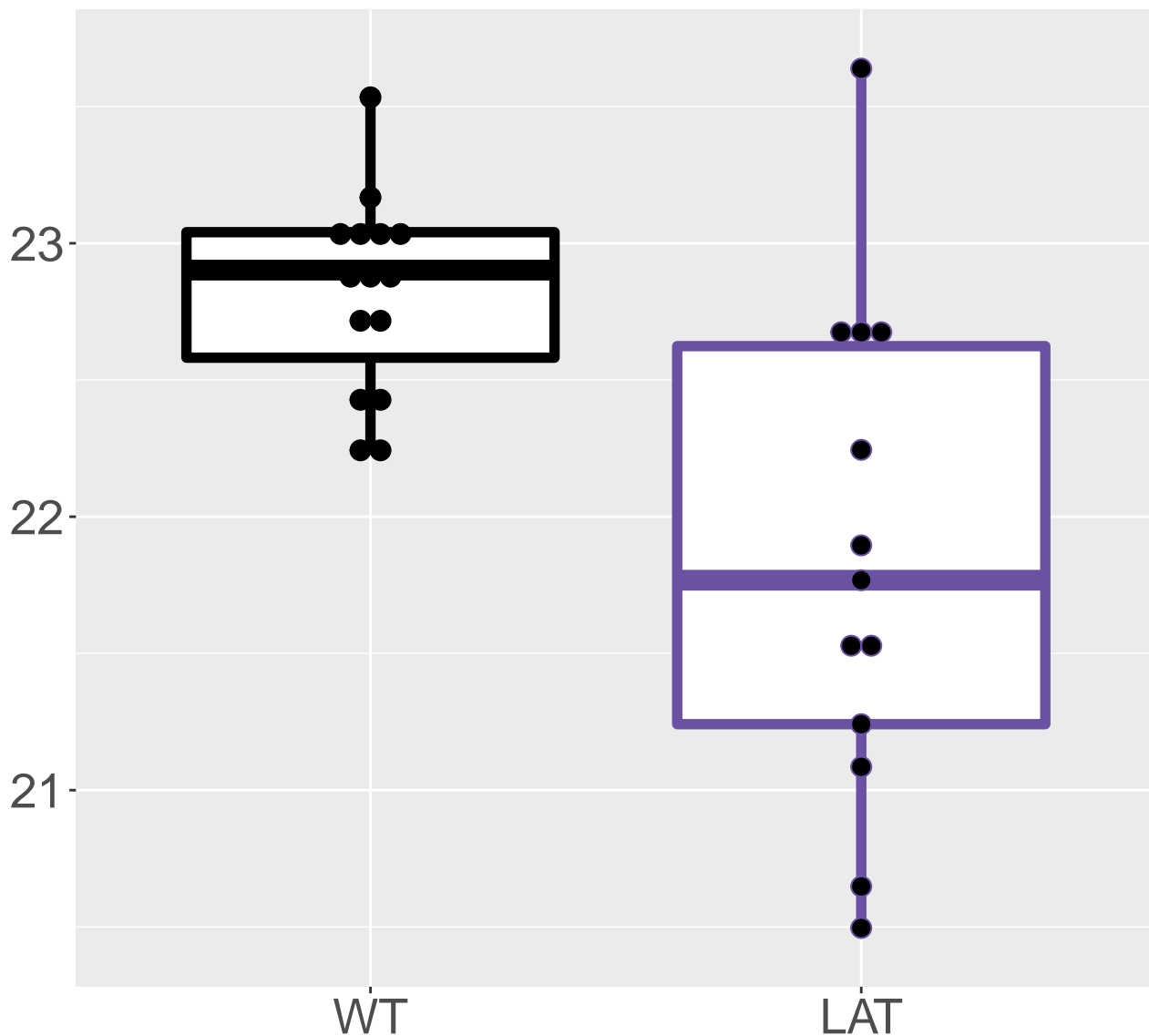


**M966.7058T597.64**  
**FDR = 0.0038, FC = 1.5**



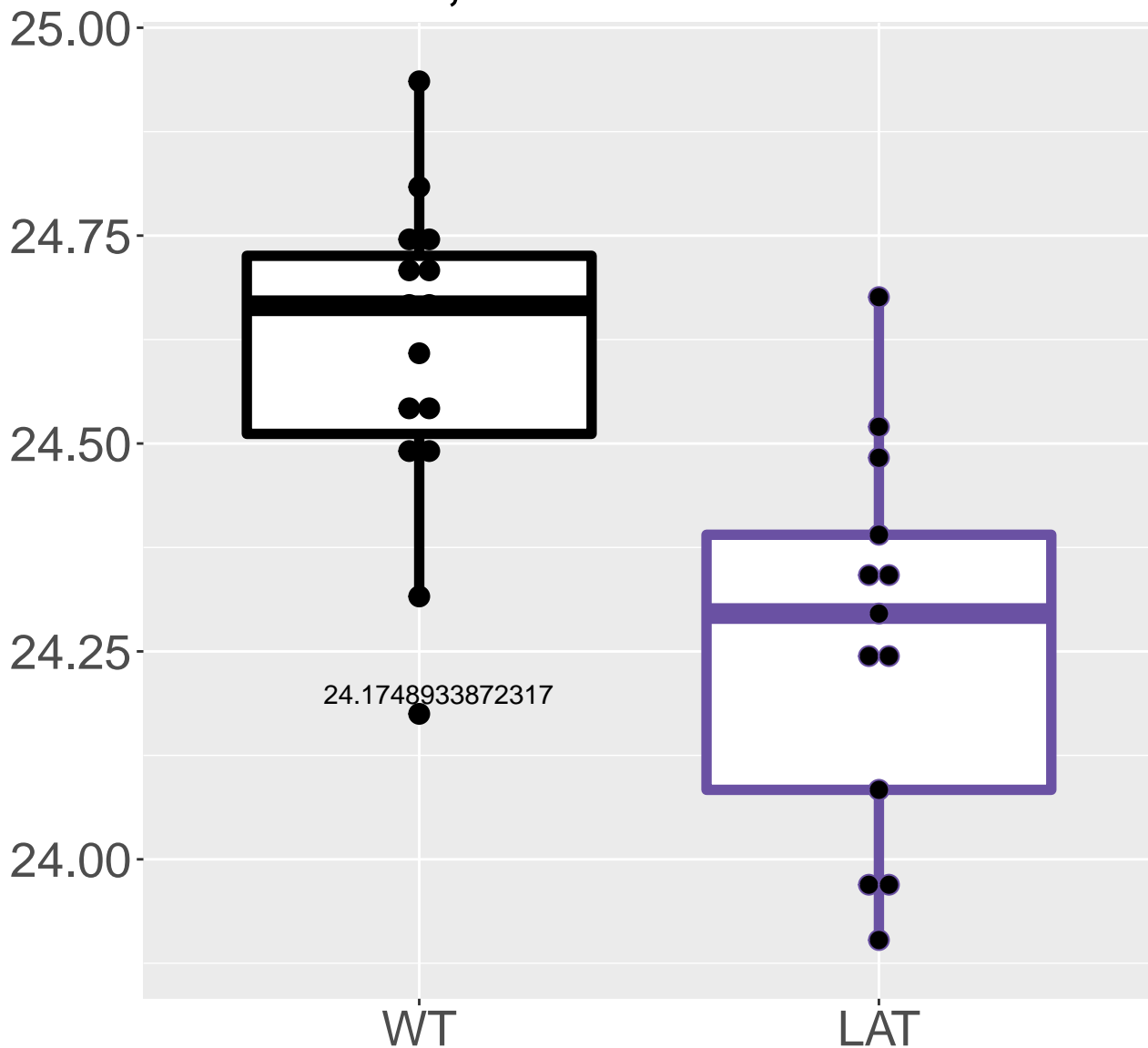
**M474.1472T526.24**

**FDR = 0.0038, FC = -0.97**



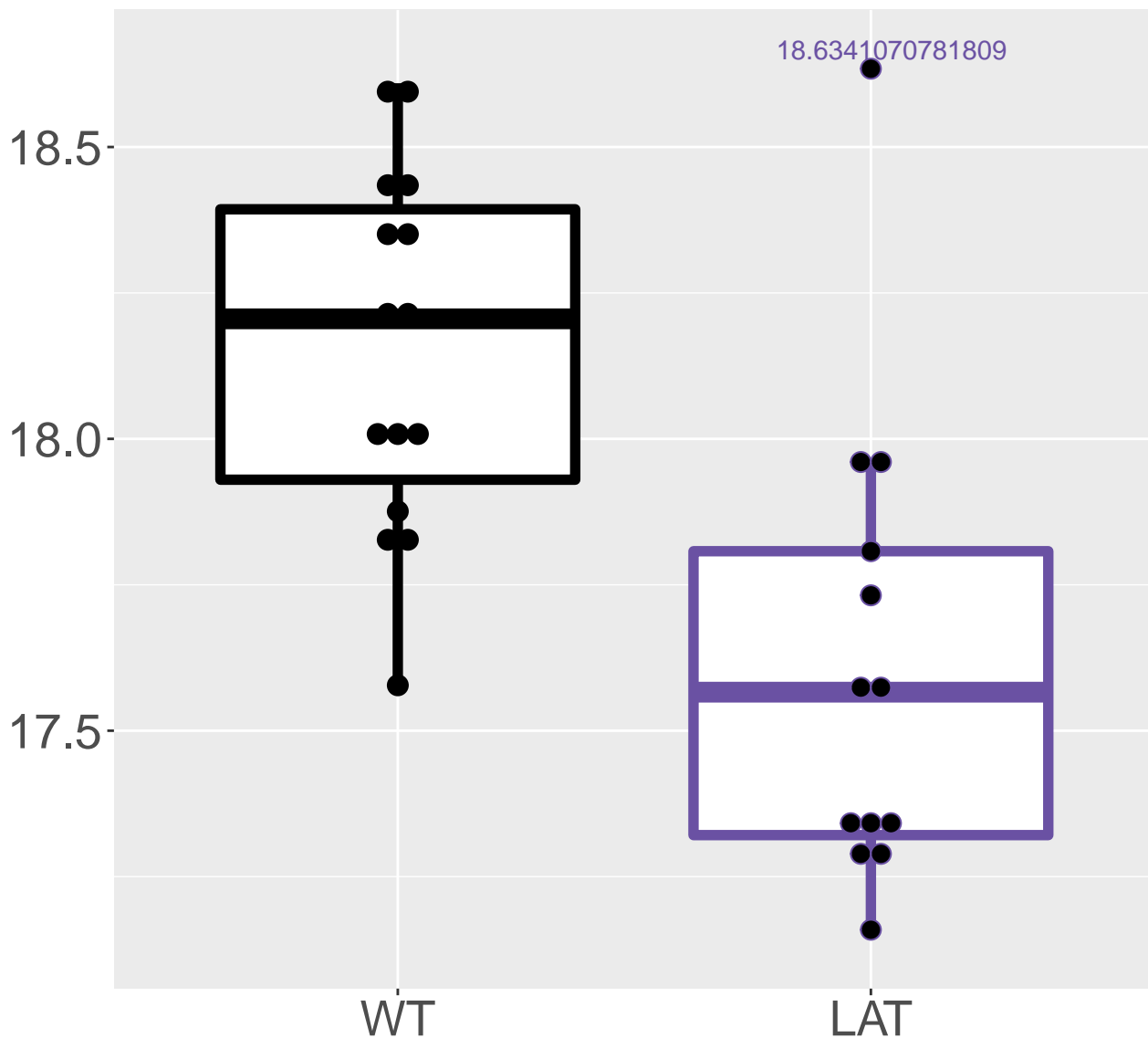
# L-Histidine

FDR = 0.0038, FC = -0.34



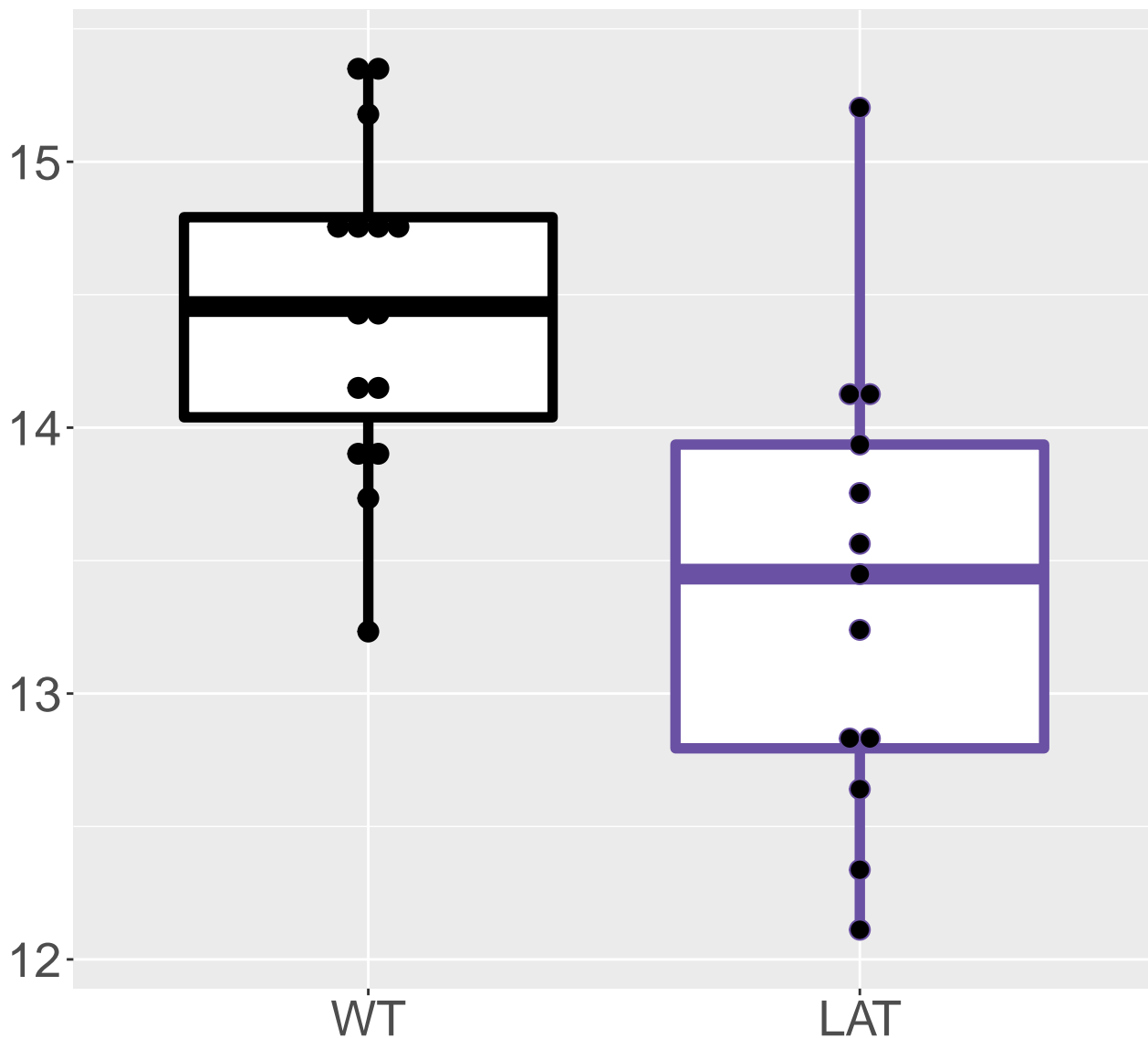
**M663.2002T621.04**

**FDR = 0.0039, FC = -0.54**

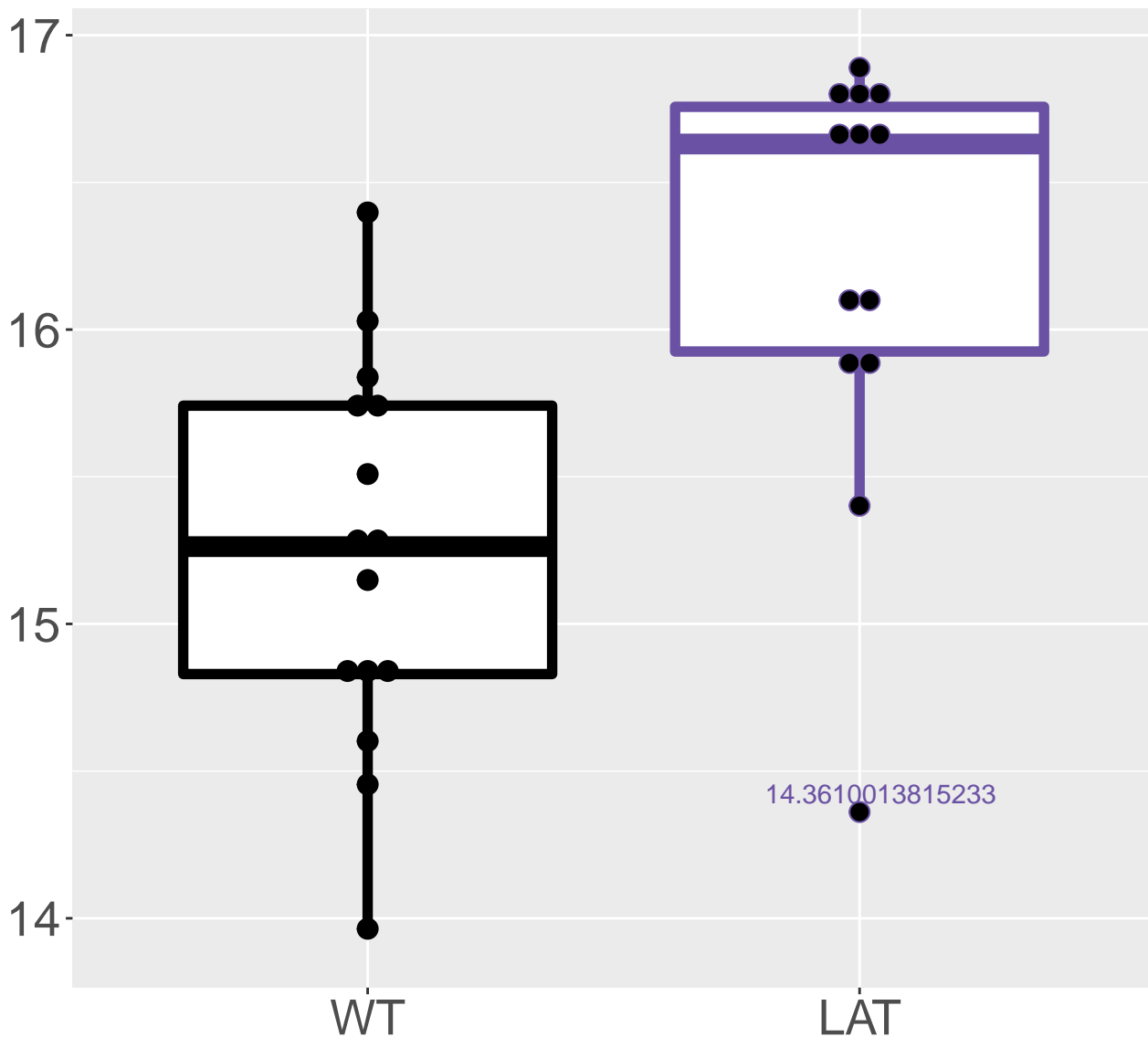


**M517.16T639.92**

**FDR = 0.0042, FC = -1.1**

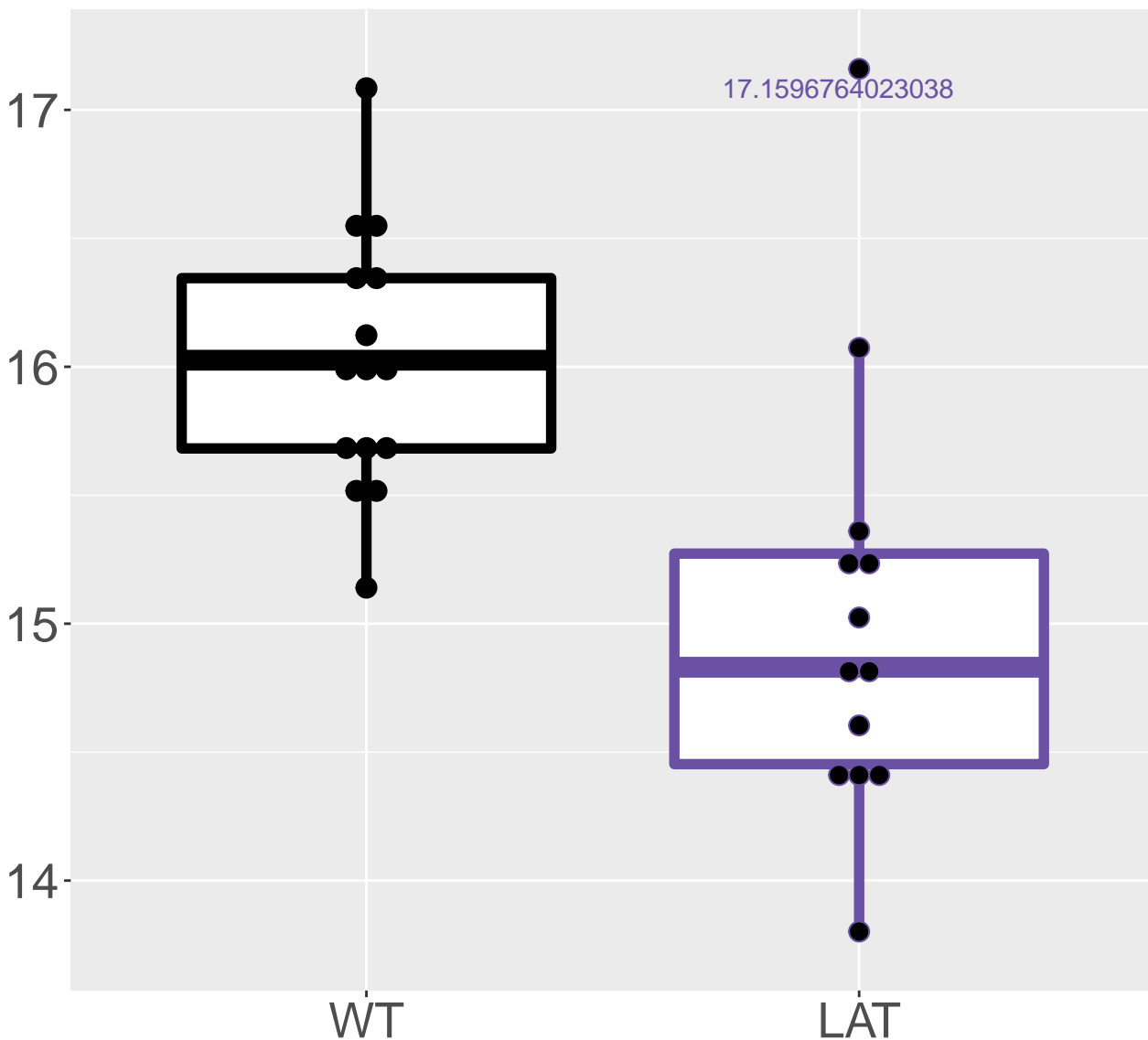


**M660.63T598.5\_1**  
**FDR = 0.0044, FC = 1**

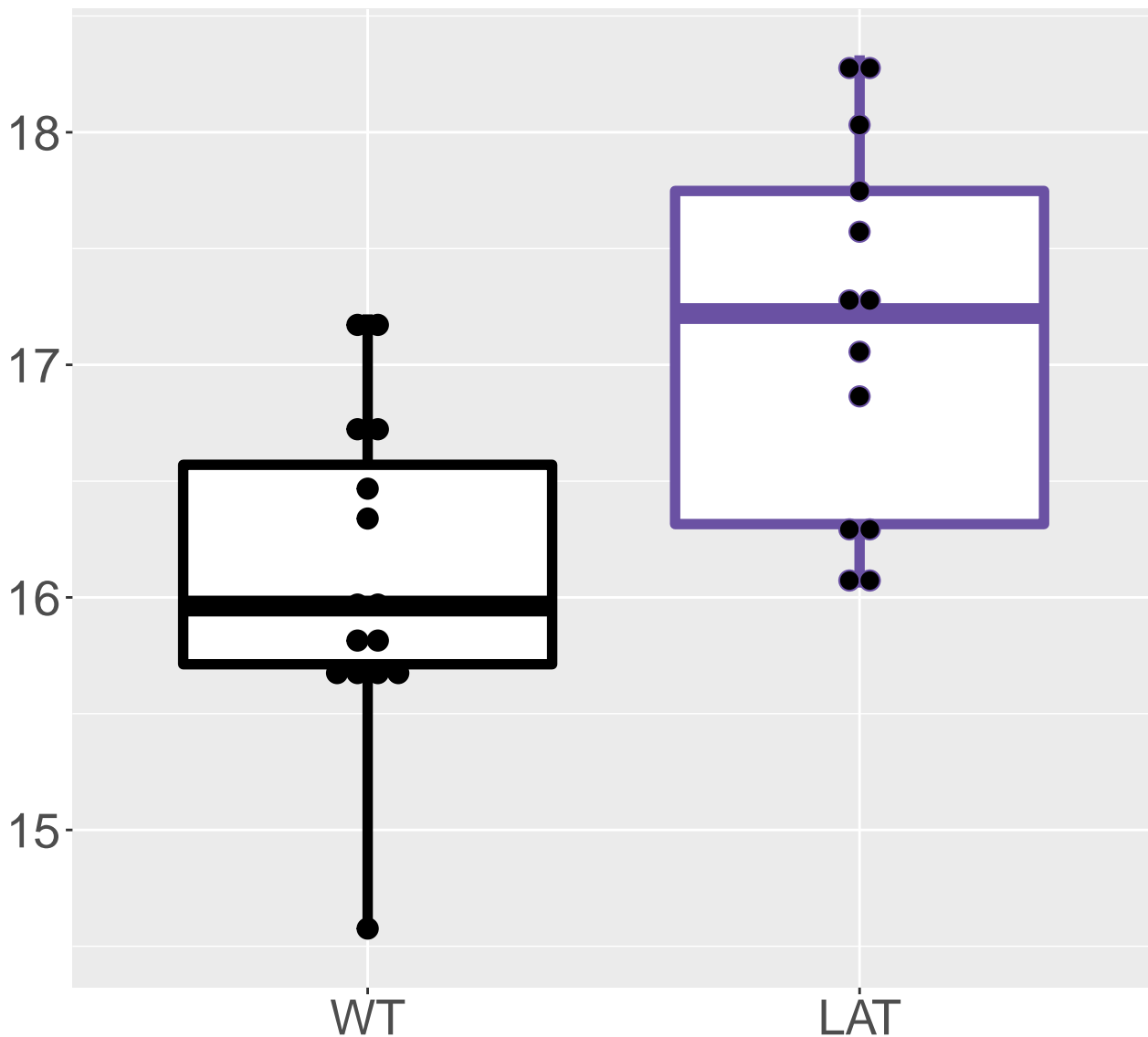


**M900.7925T682.76**

**FDR = 0.0044, FC = -0.99**

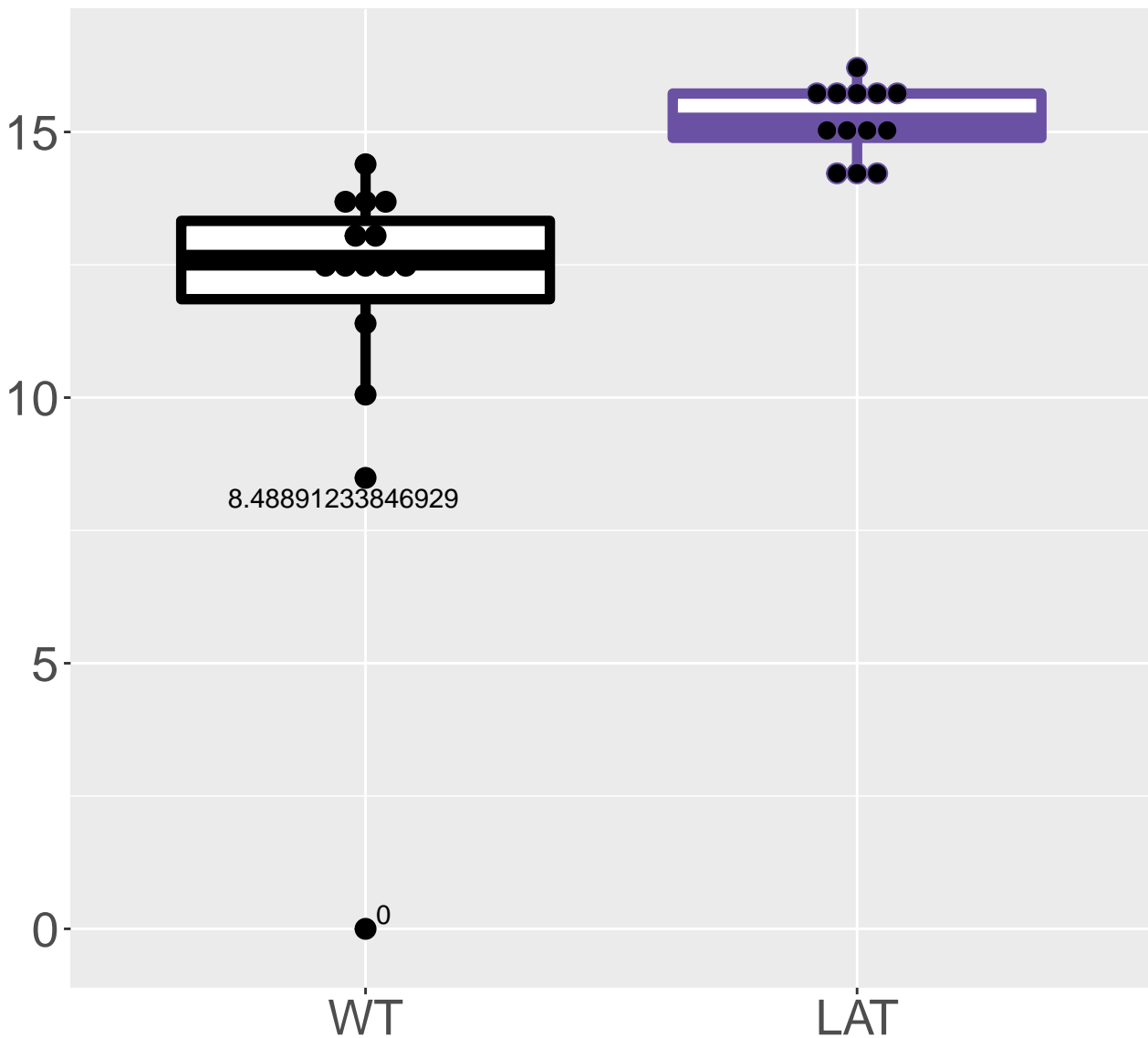


**M991.209T541.31**  
**FDR = 0.0044, FC = 1.1**



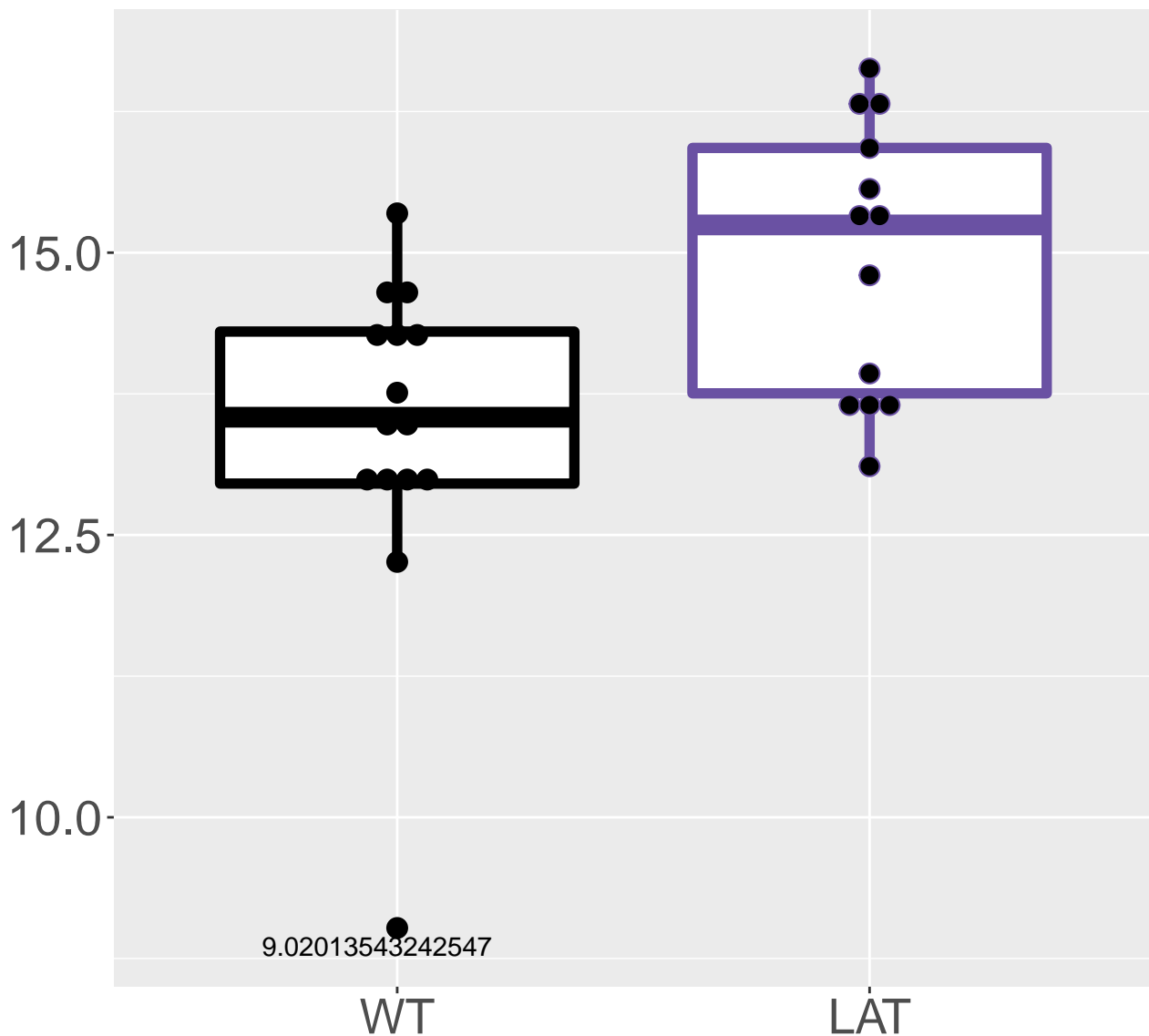


**M767.2362T368.97**  
**FDR = 0.0044, FC = 3.6**

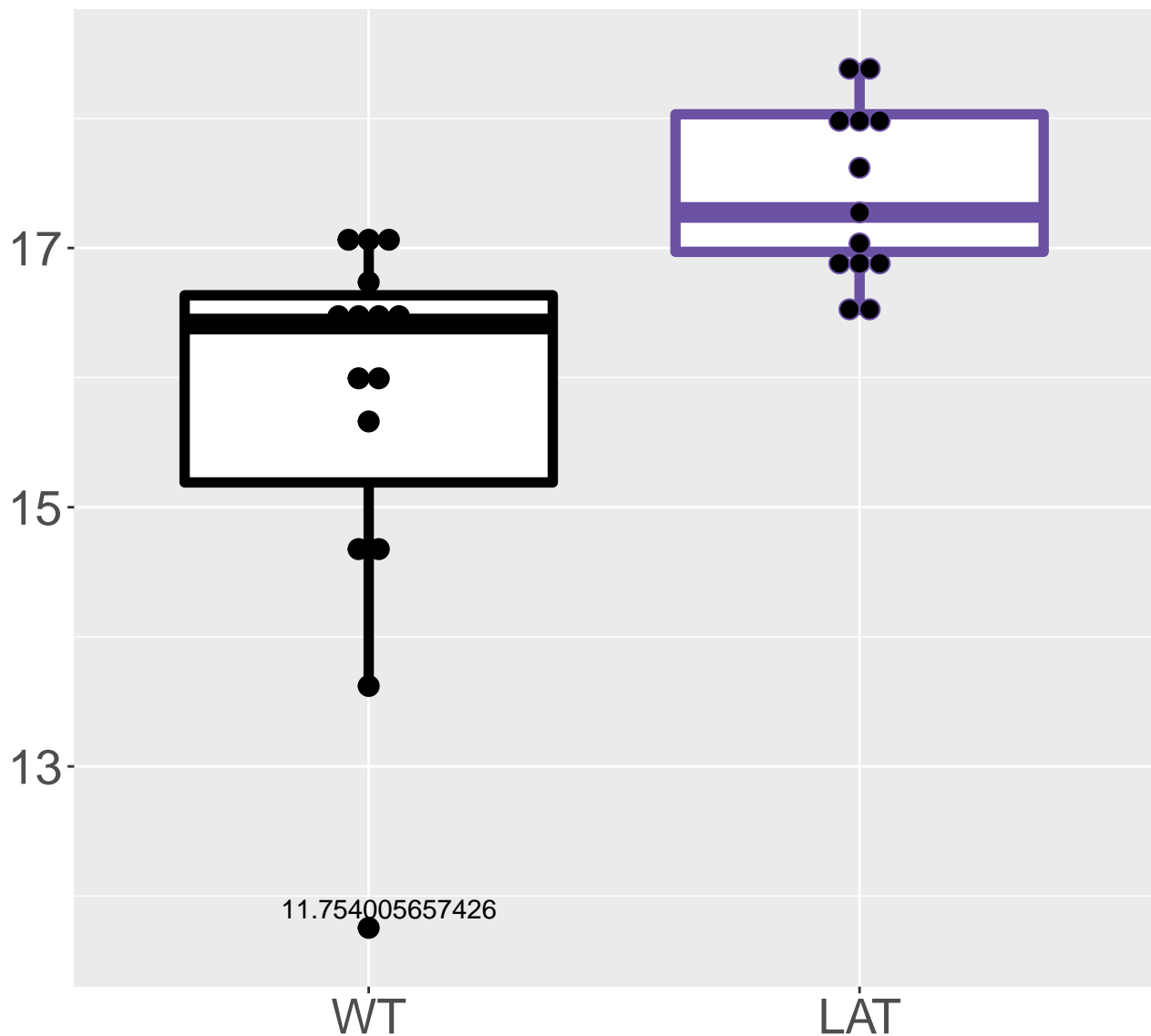


**M109.0408T110.53**

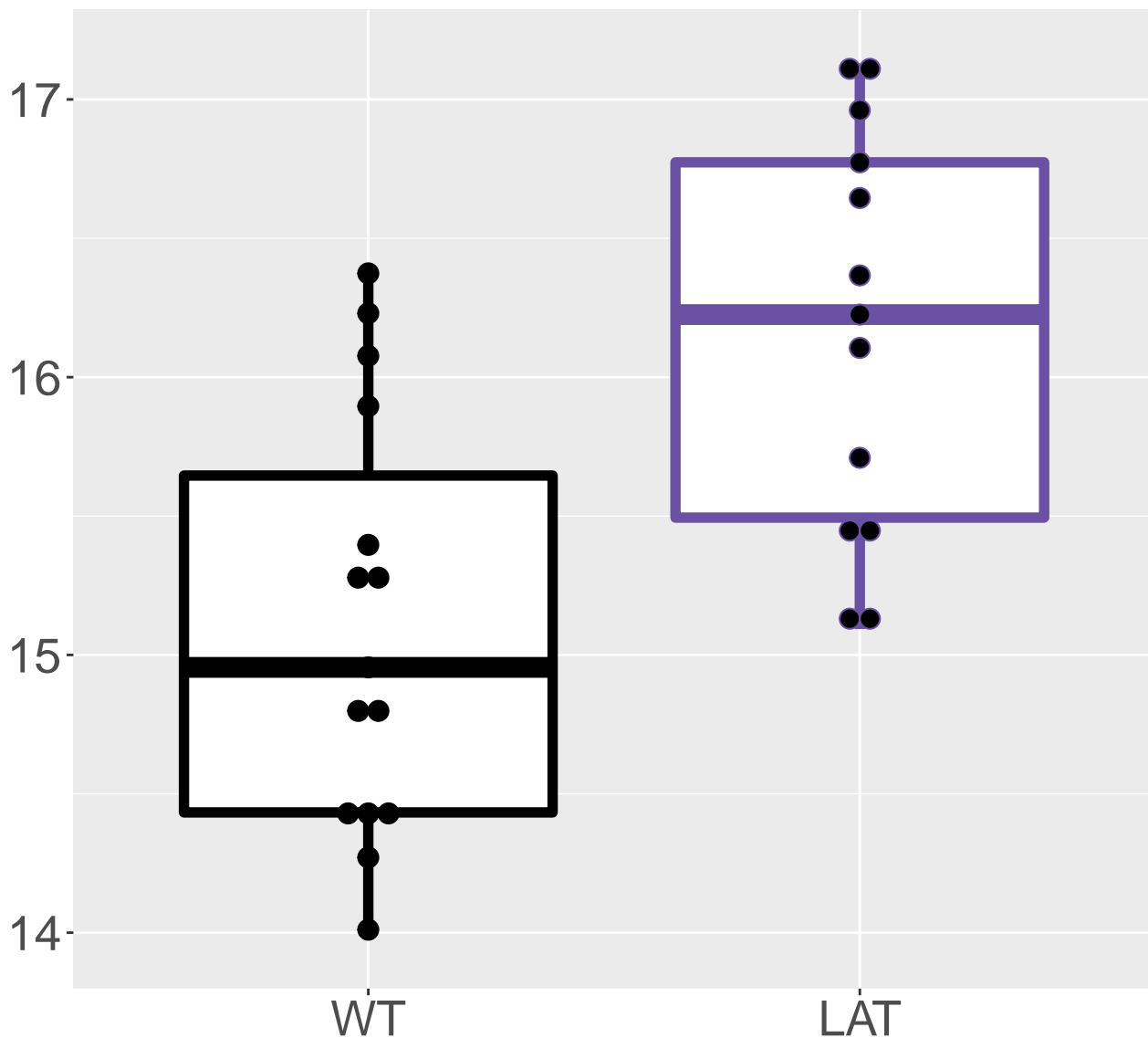
**FDR = 0.0044, FC = 1.5, sex\*\*\***



**2,3-Diphospho-D-glyceric acid;2,3-Bisphospho**  
**FDR = 0.0044, FC = 1.7**

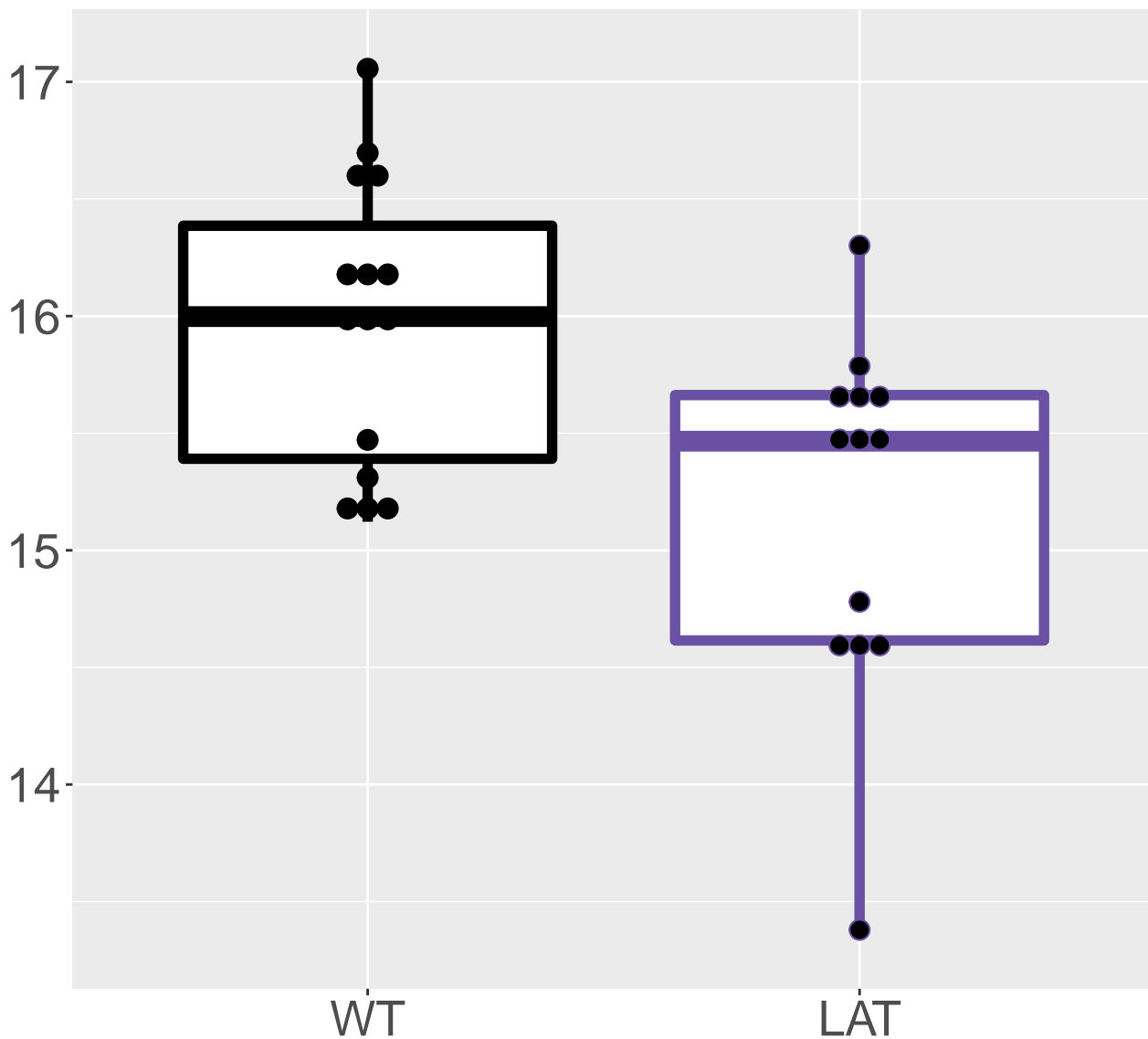


**M428.0447T628.52**  
**FDR = 0.0045, FC = 1.1**



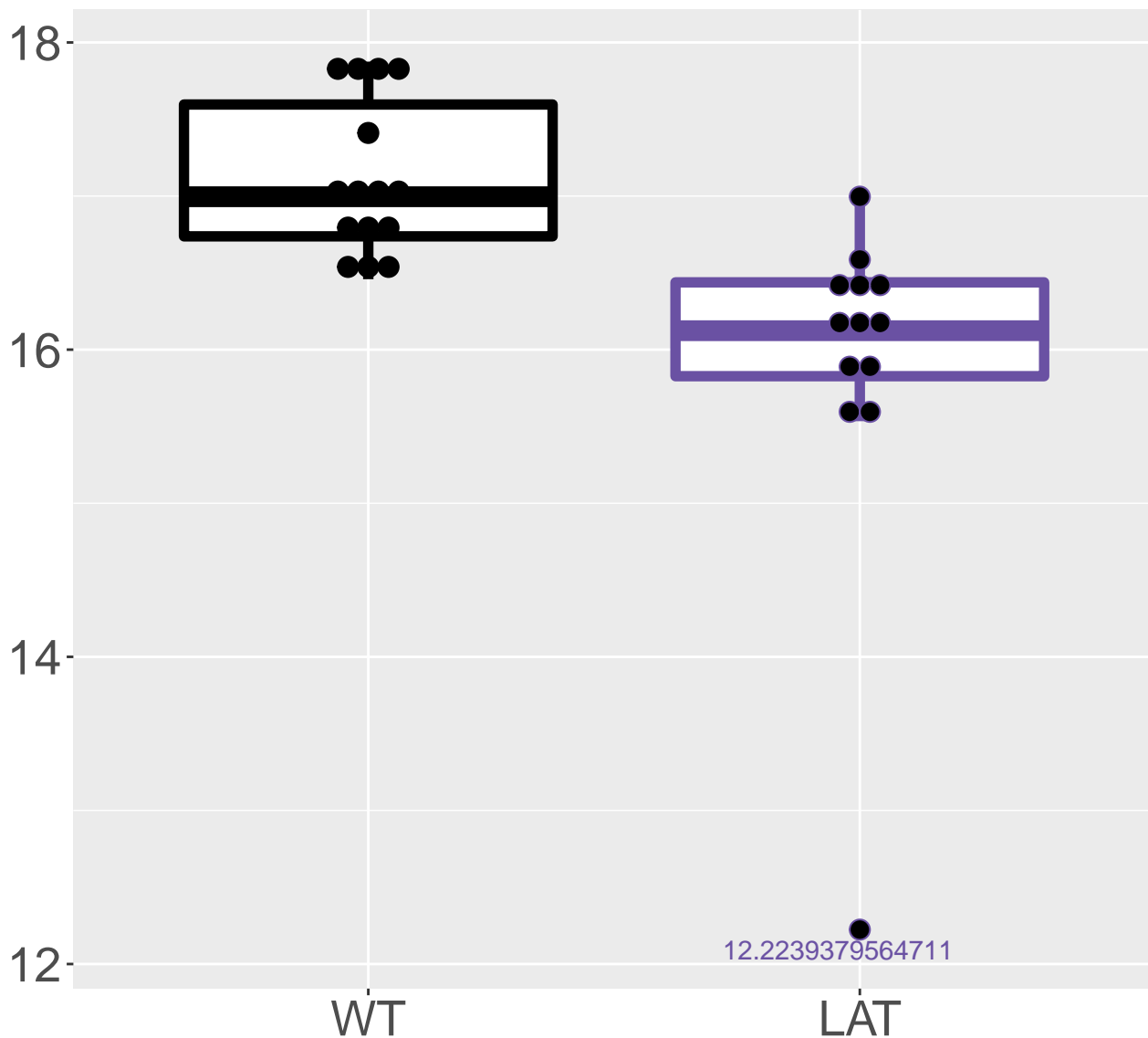
**M537.1678T516.89**

**FDR = 0.0045, FC = -0.8**



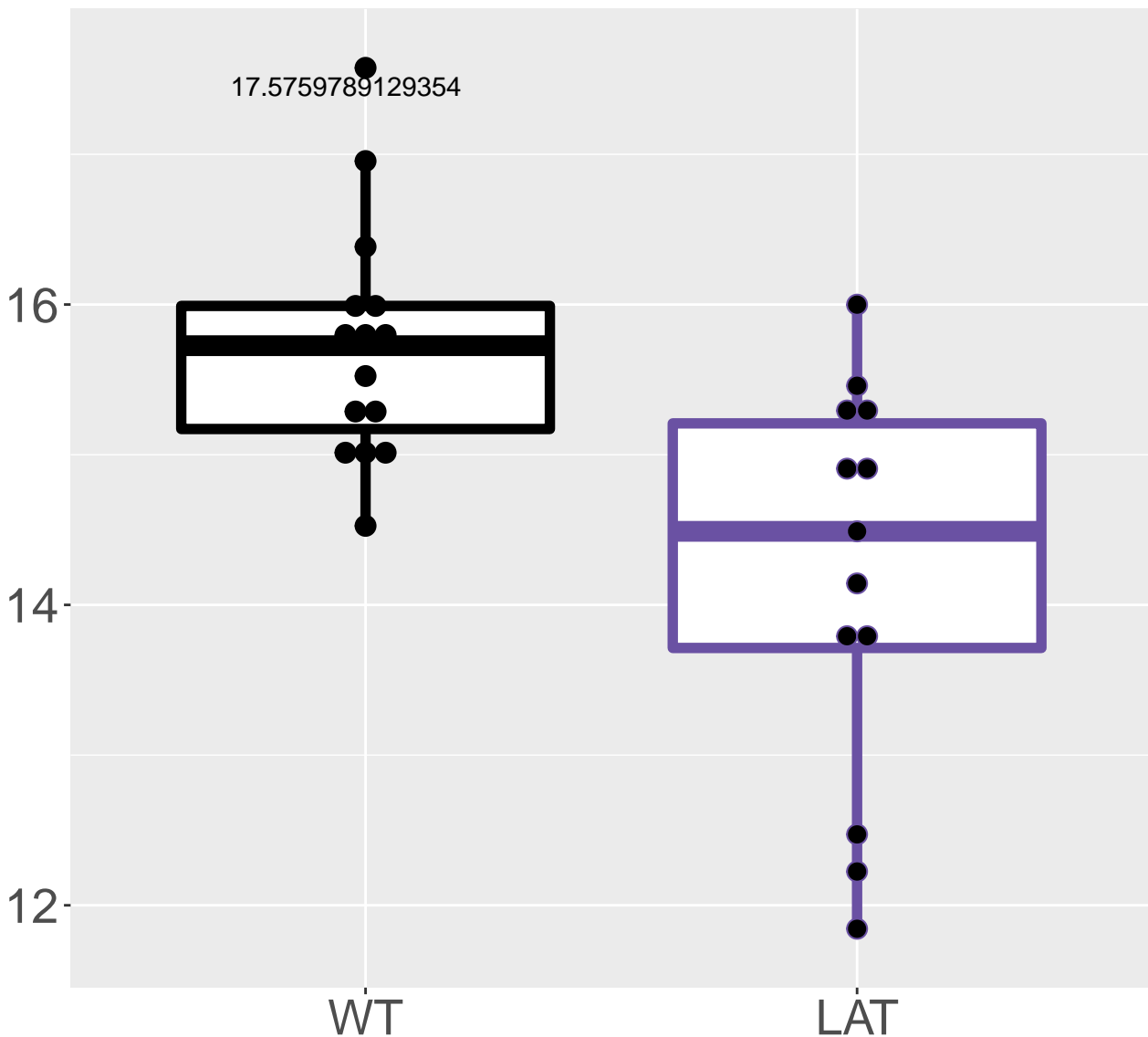
**M296.1144T155.38**

**FDR = 0.0045, FC = -1.2**



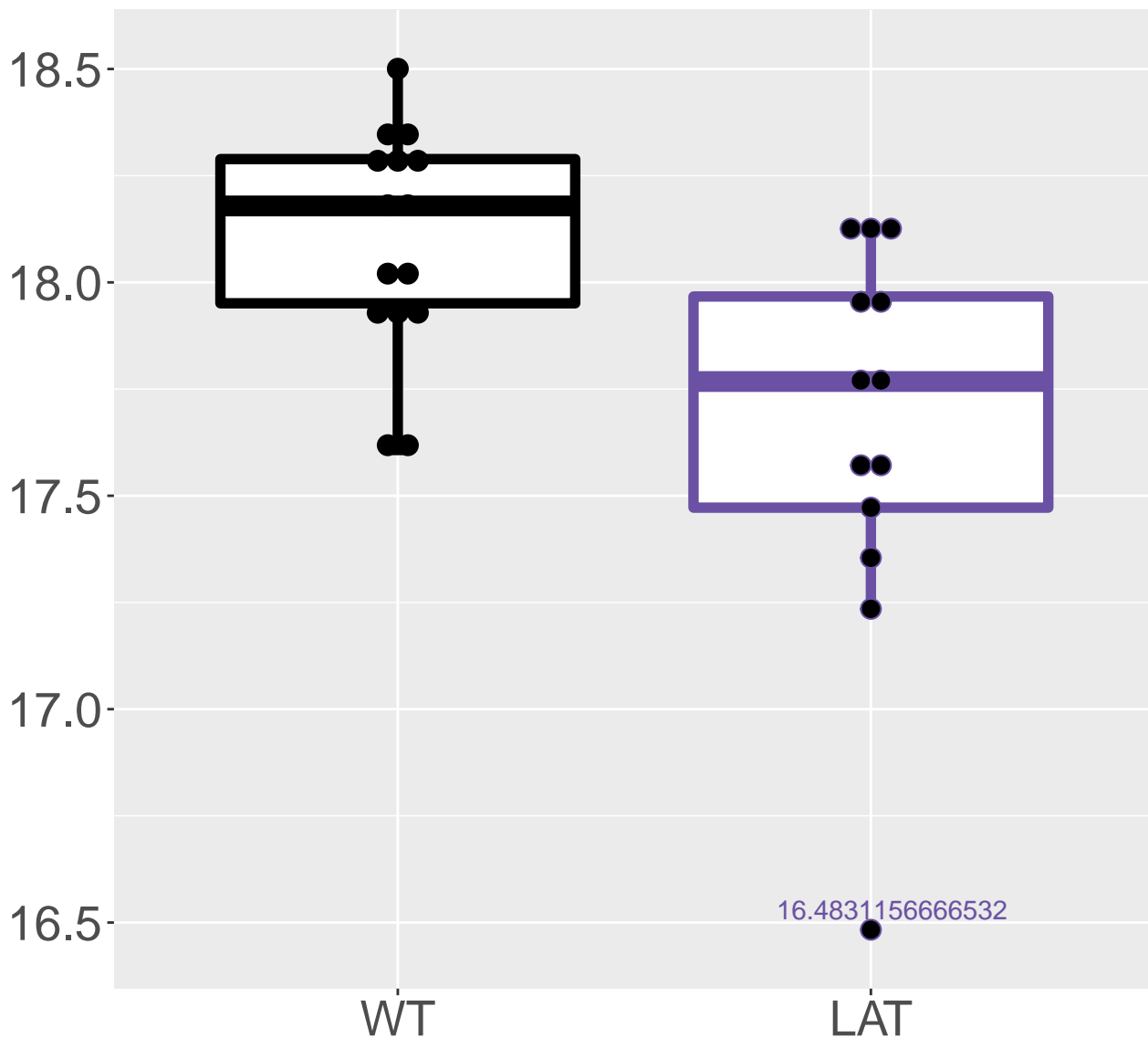
**M487.1312T535.64**

**FDR = 0.0046, FC = -1.5**



**M800.2332T617.81**

**FDR = 0.0046, FC = -0.45**



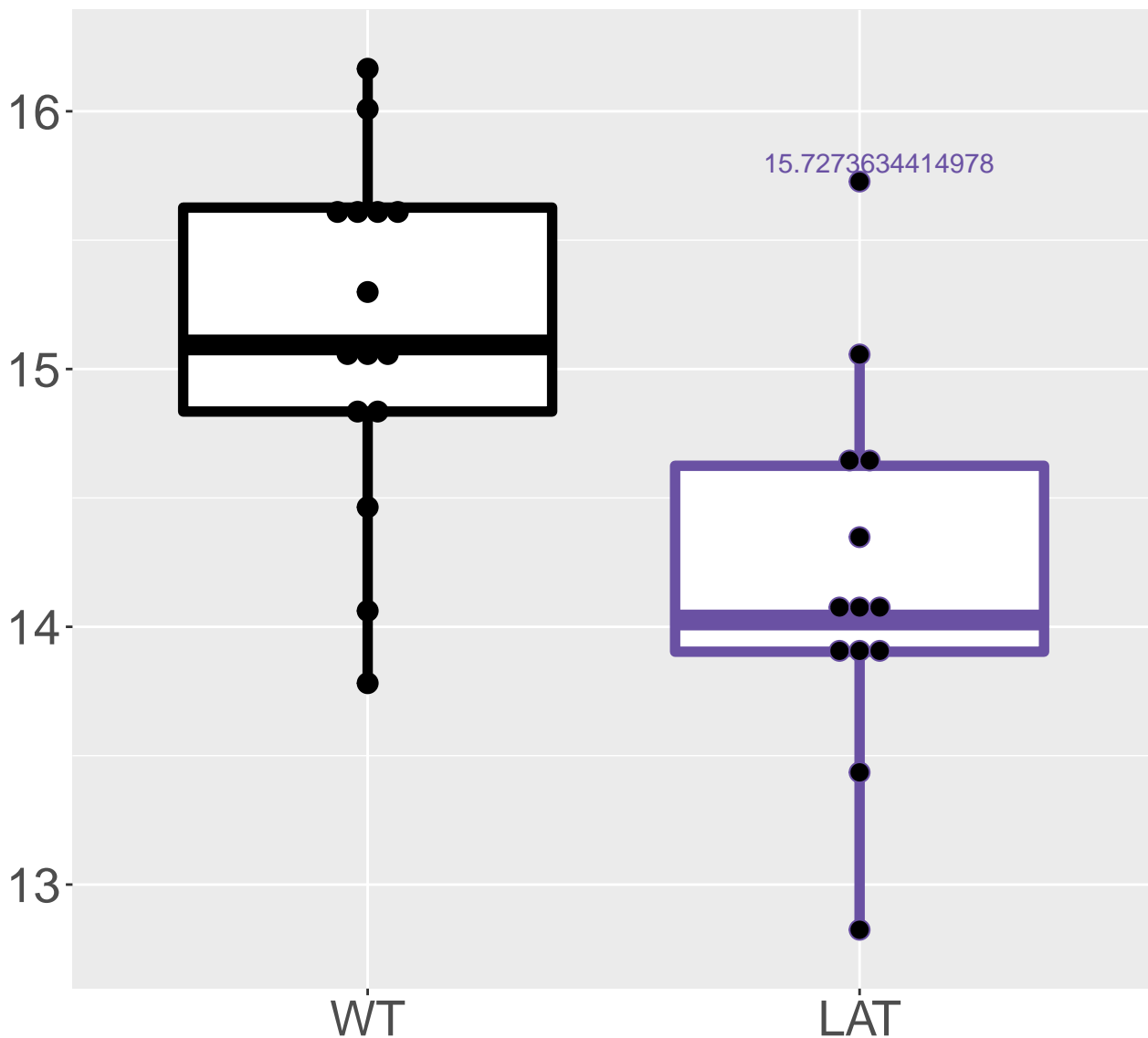


**FDR = 0.0046, FC = -0.7**

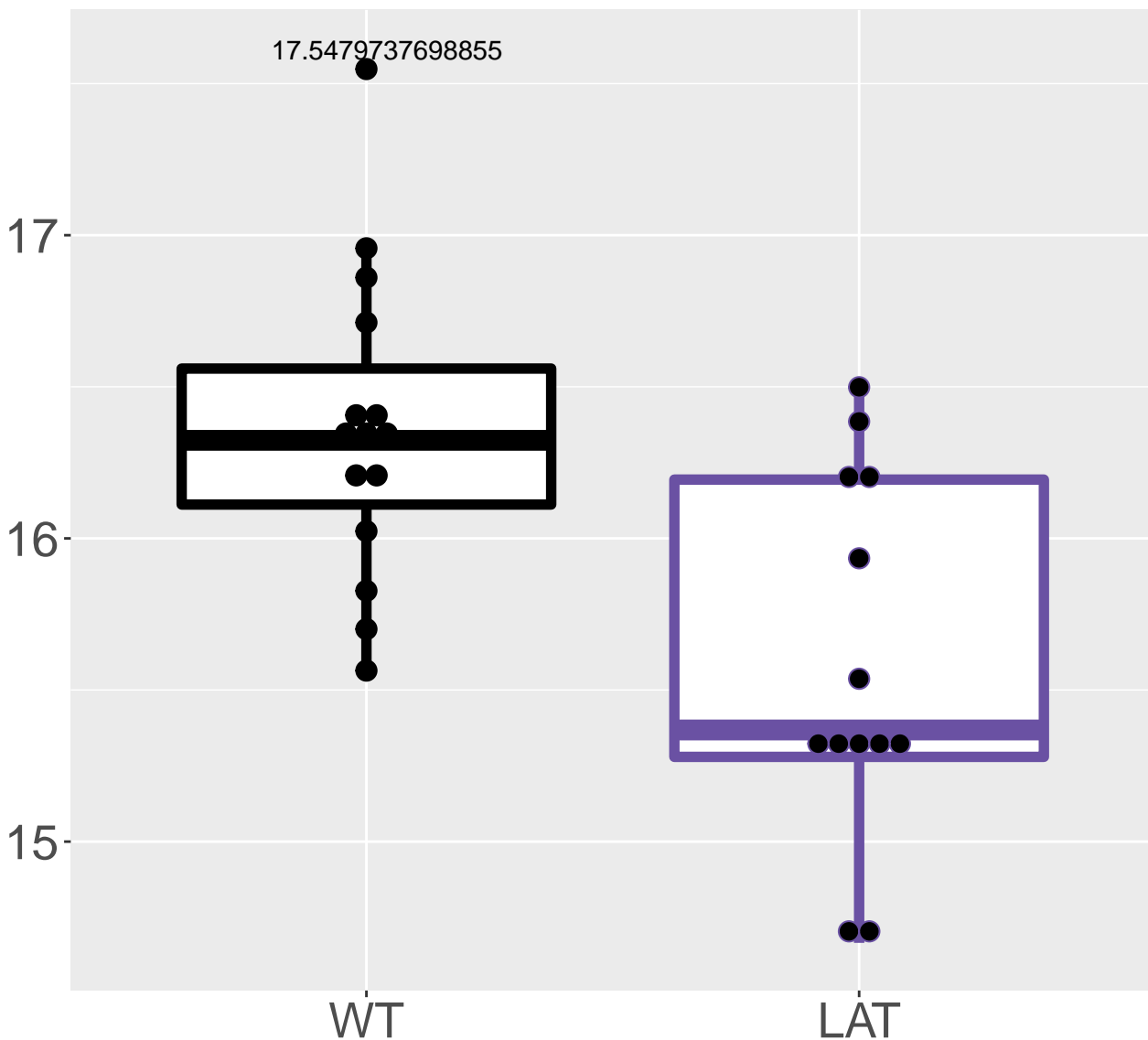


**M334.0955T368.85**

**FDR = 0.0048, FC = -0.94**

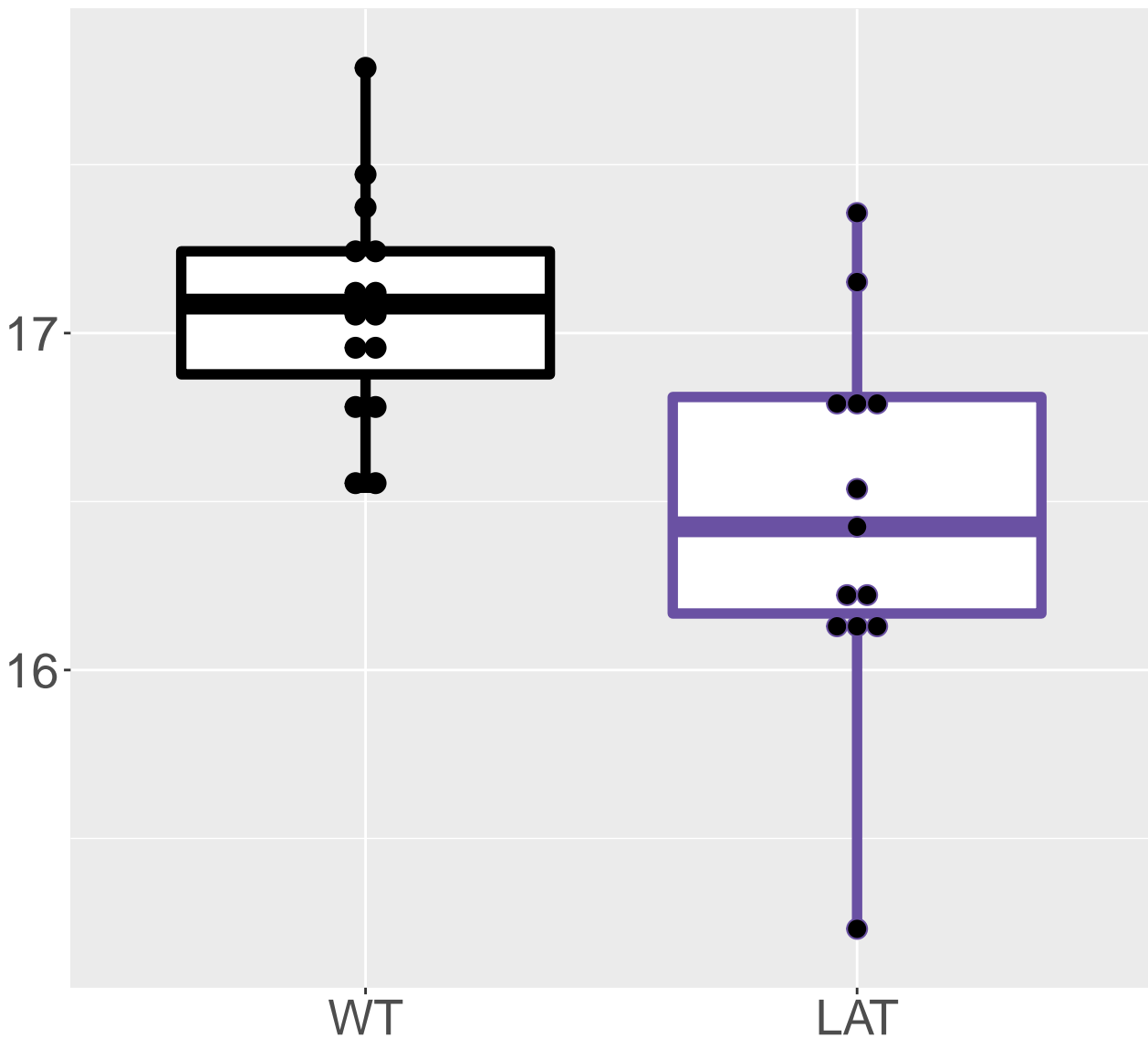


**FDR = 0.0049, FC = -0.77**



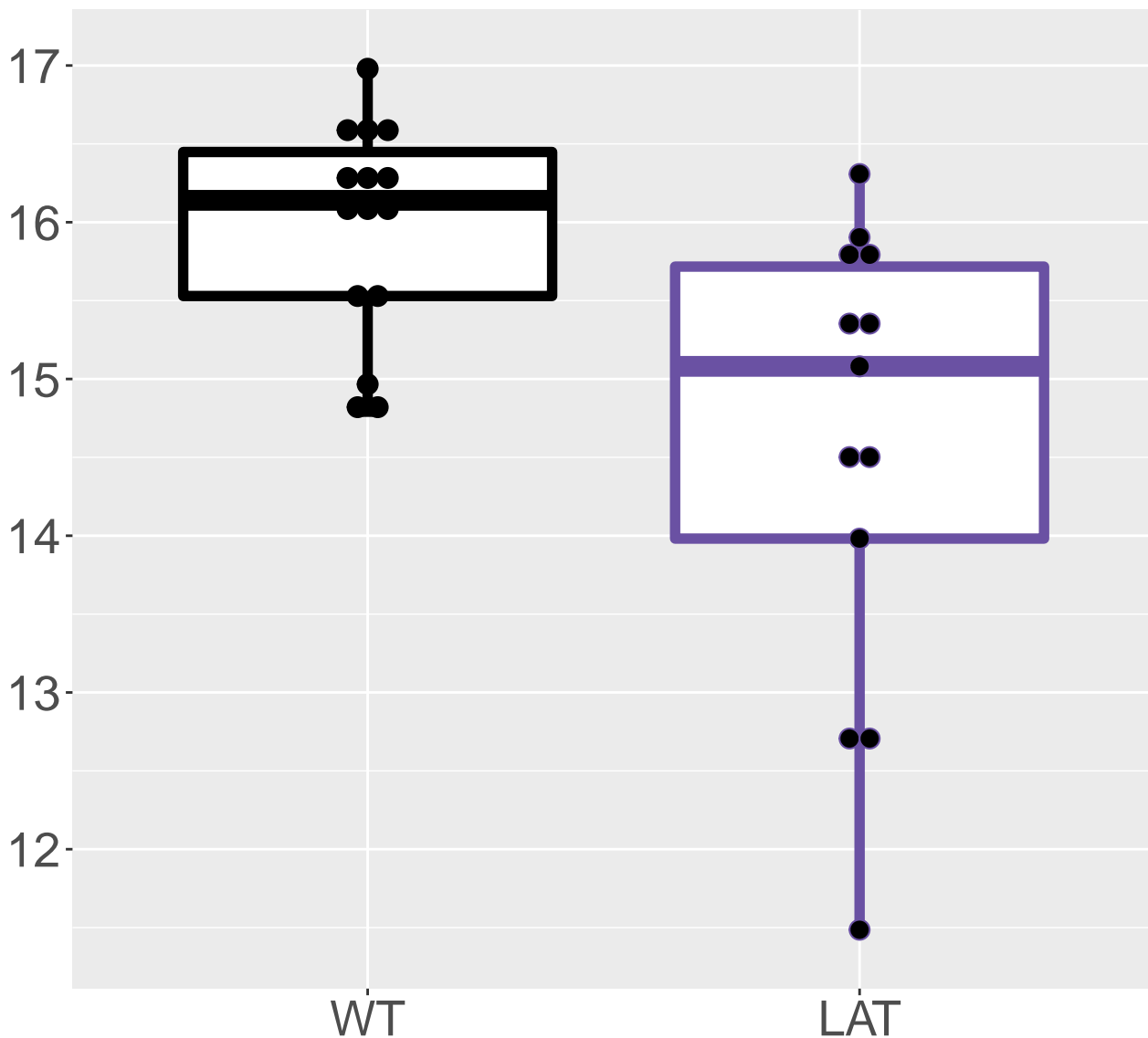
**M830.994T548.76**

**FDR = 0.0049, FC = -0.61**



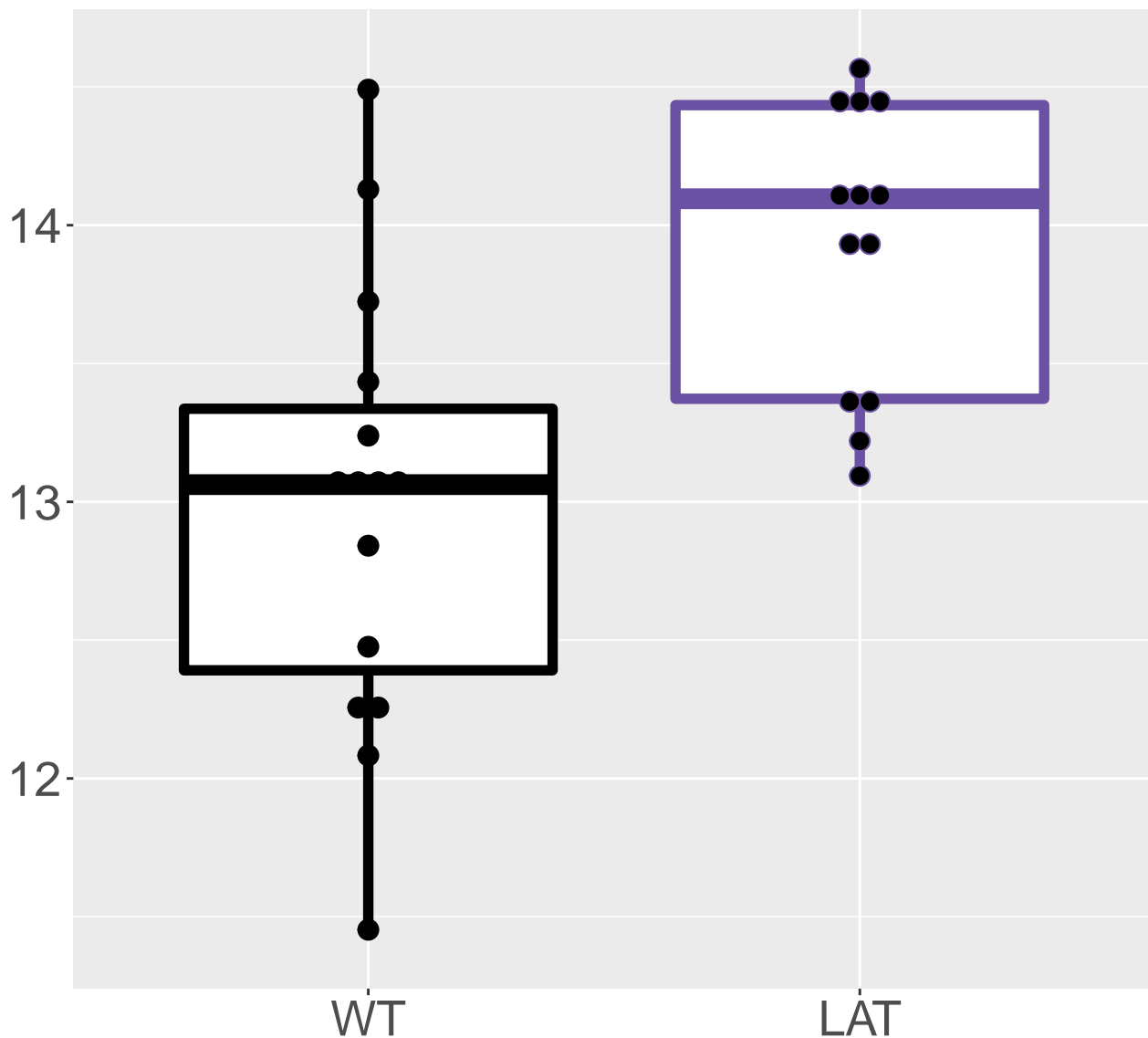
**M243.0277T542.92**

**FDR = 0.005, FC = -1.4, sex\***

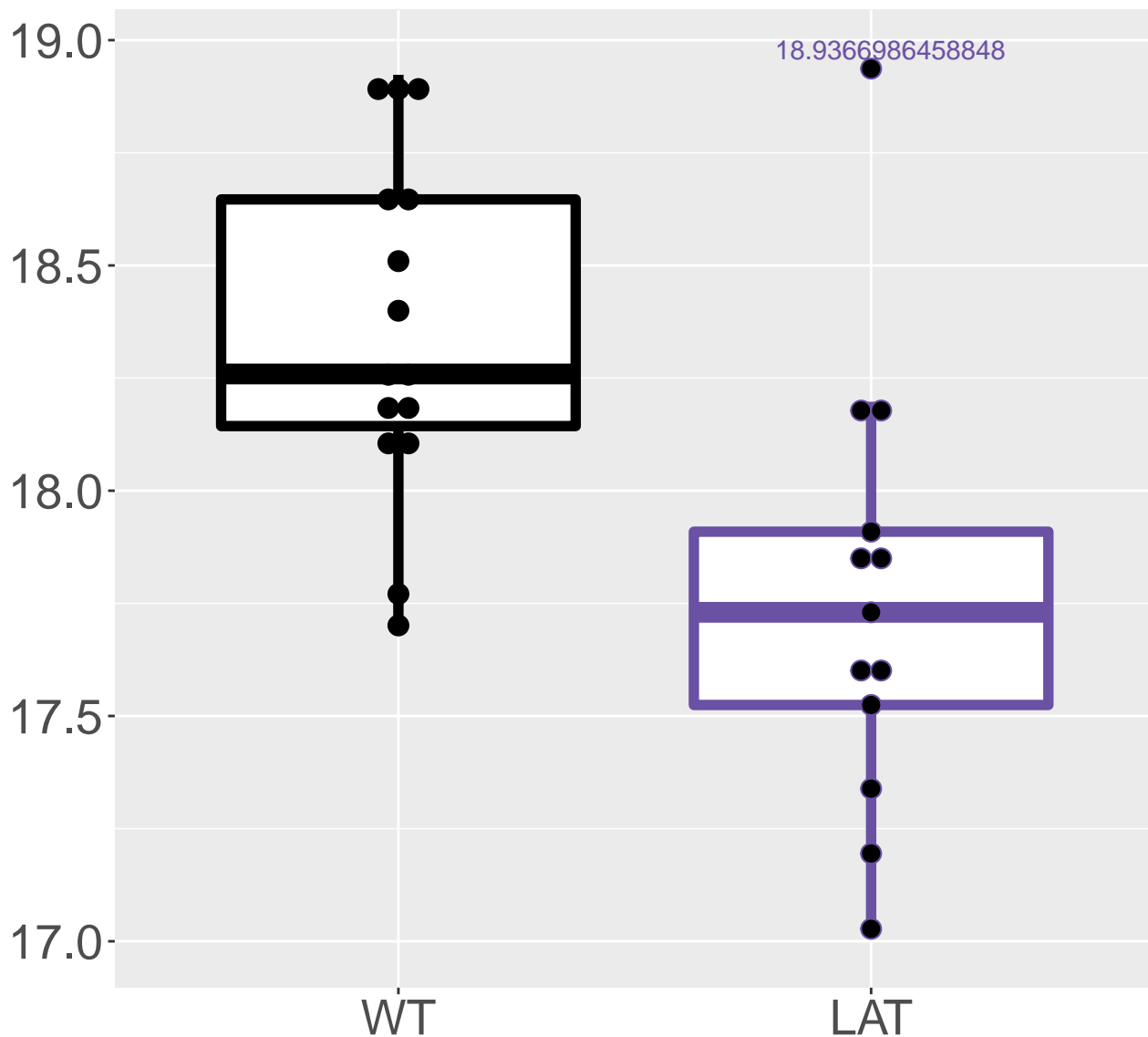


**M194.0643T667.26**

**FDR = 0.005, FC = 0.95**

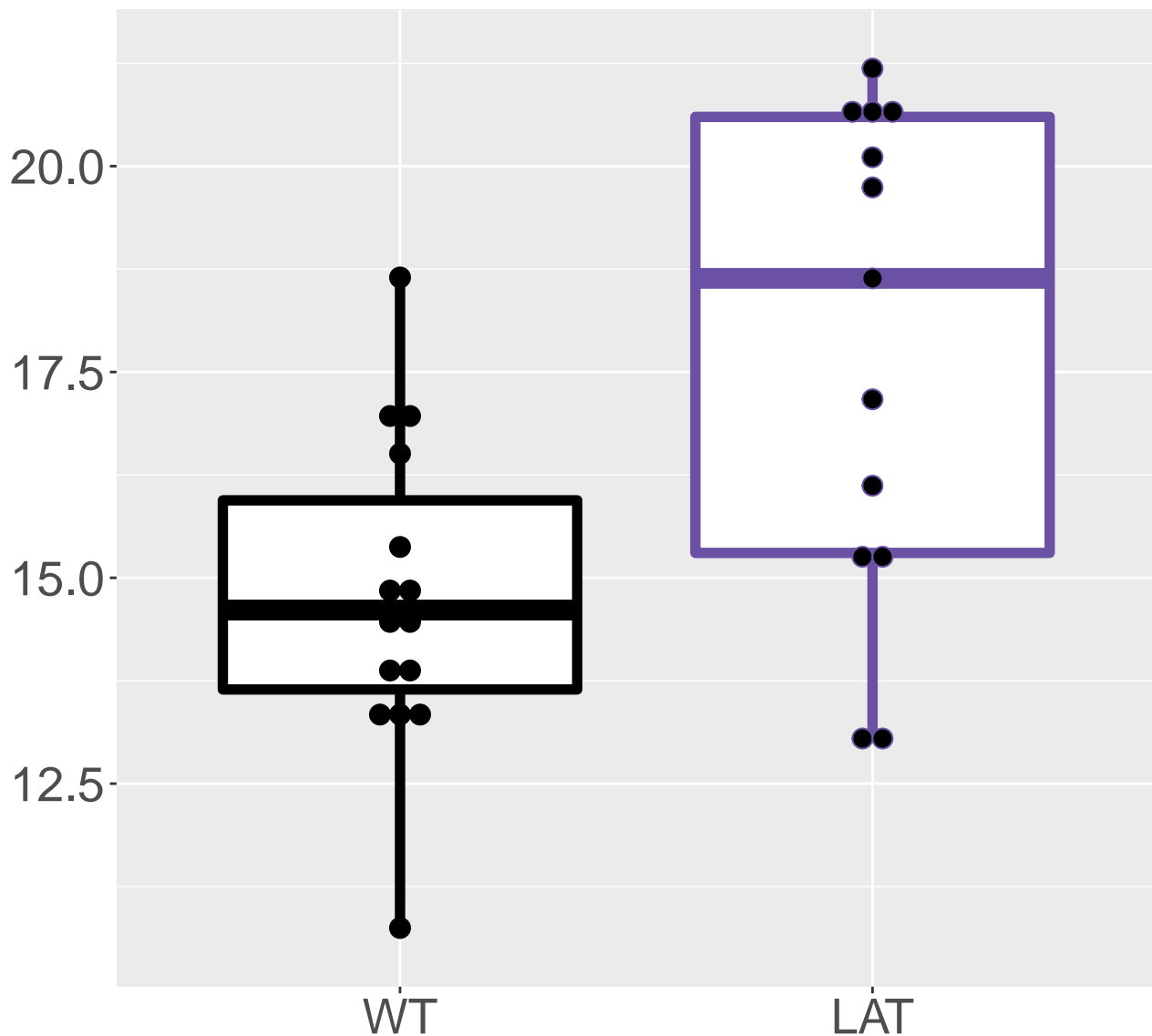


**M282.0915T536.95**  
**FDR = 0.005, FC = -0.6**



**M195.0446T272.27**

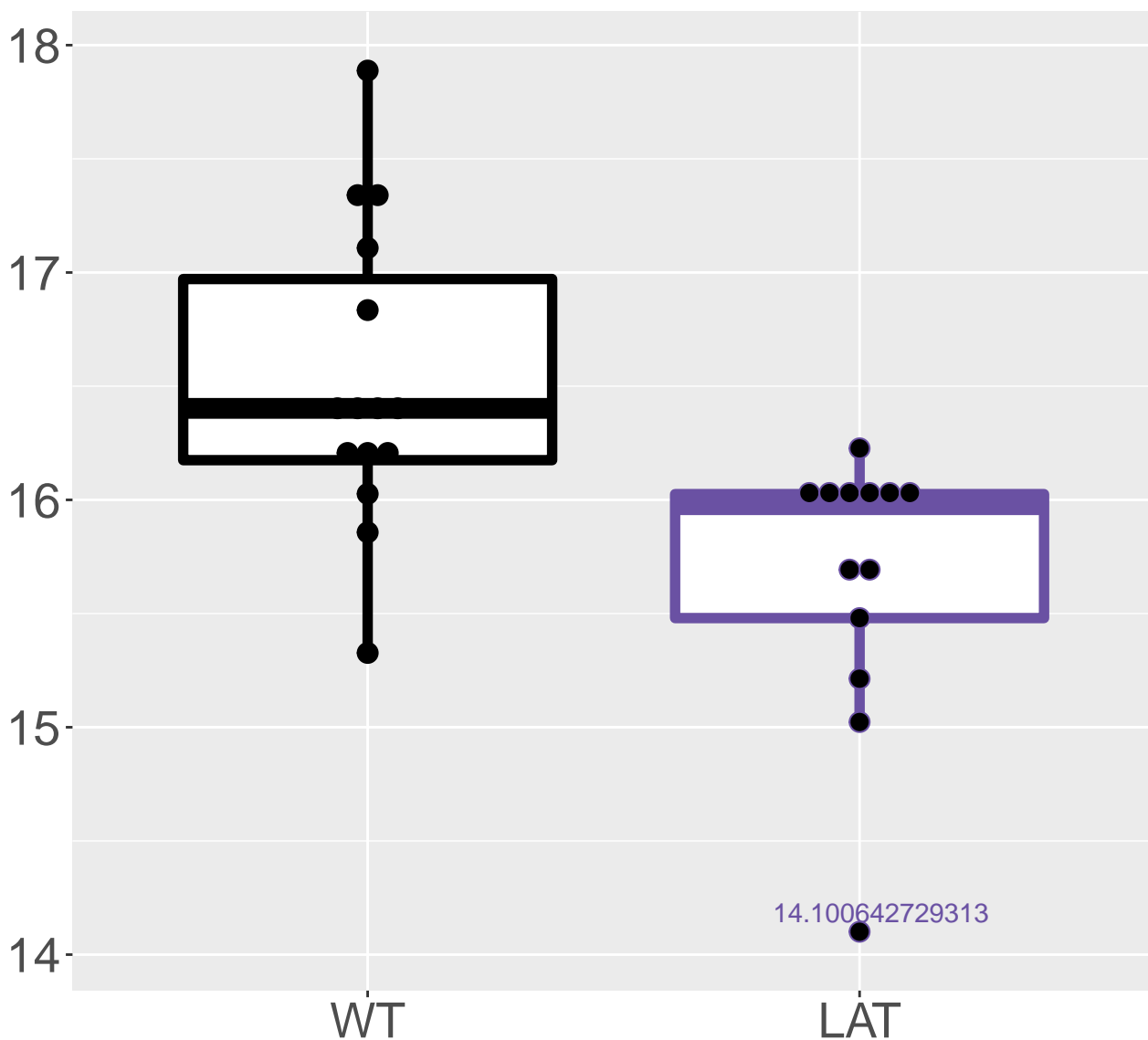
**FDR = 0.005, FC = 3, sex\***





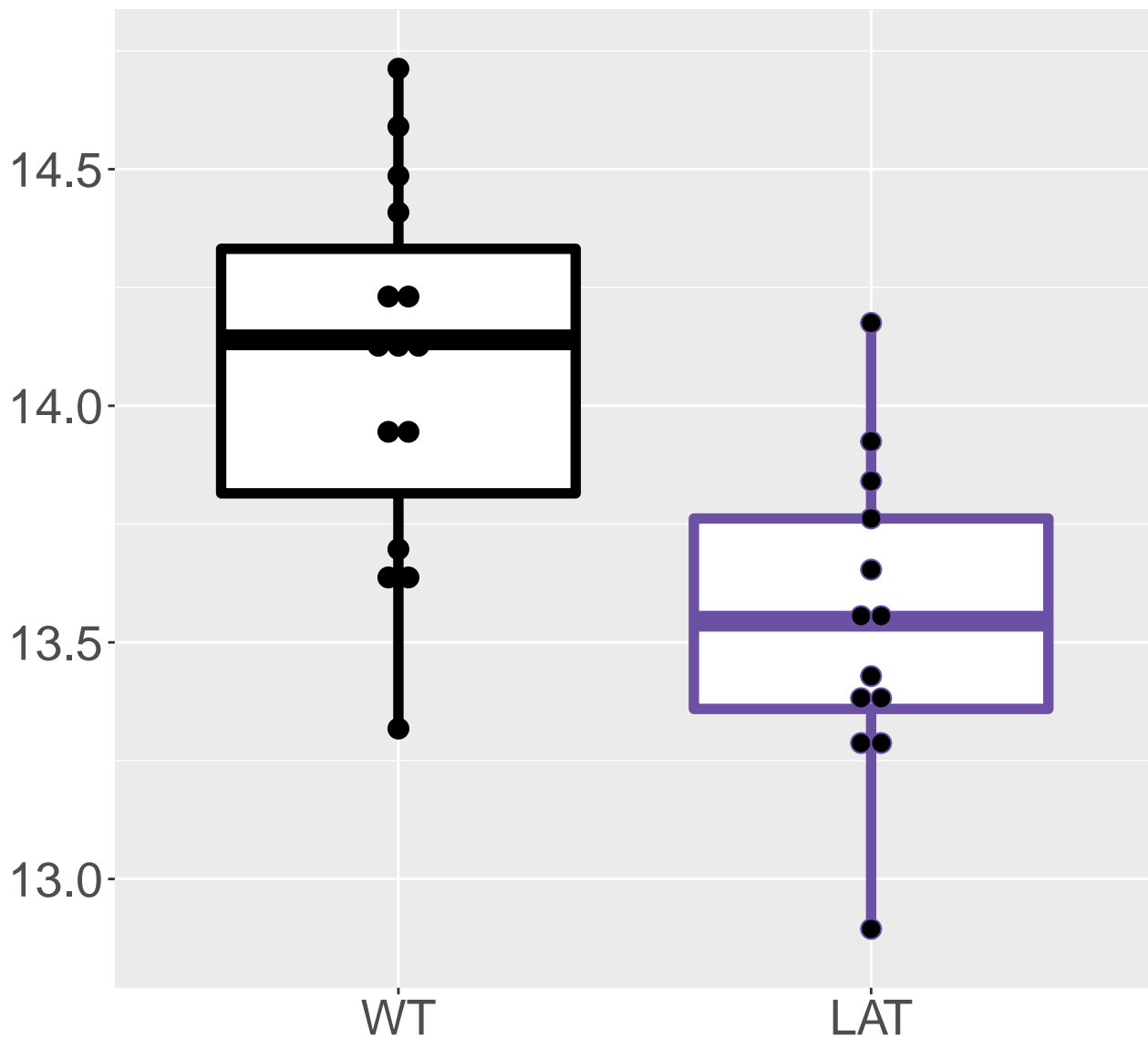
**M244.023T545.06**

**FDR = 0.005, FC = -0.87**



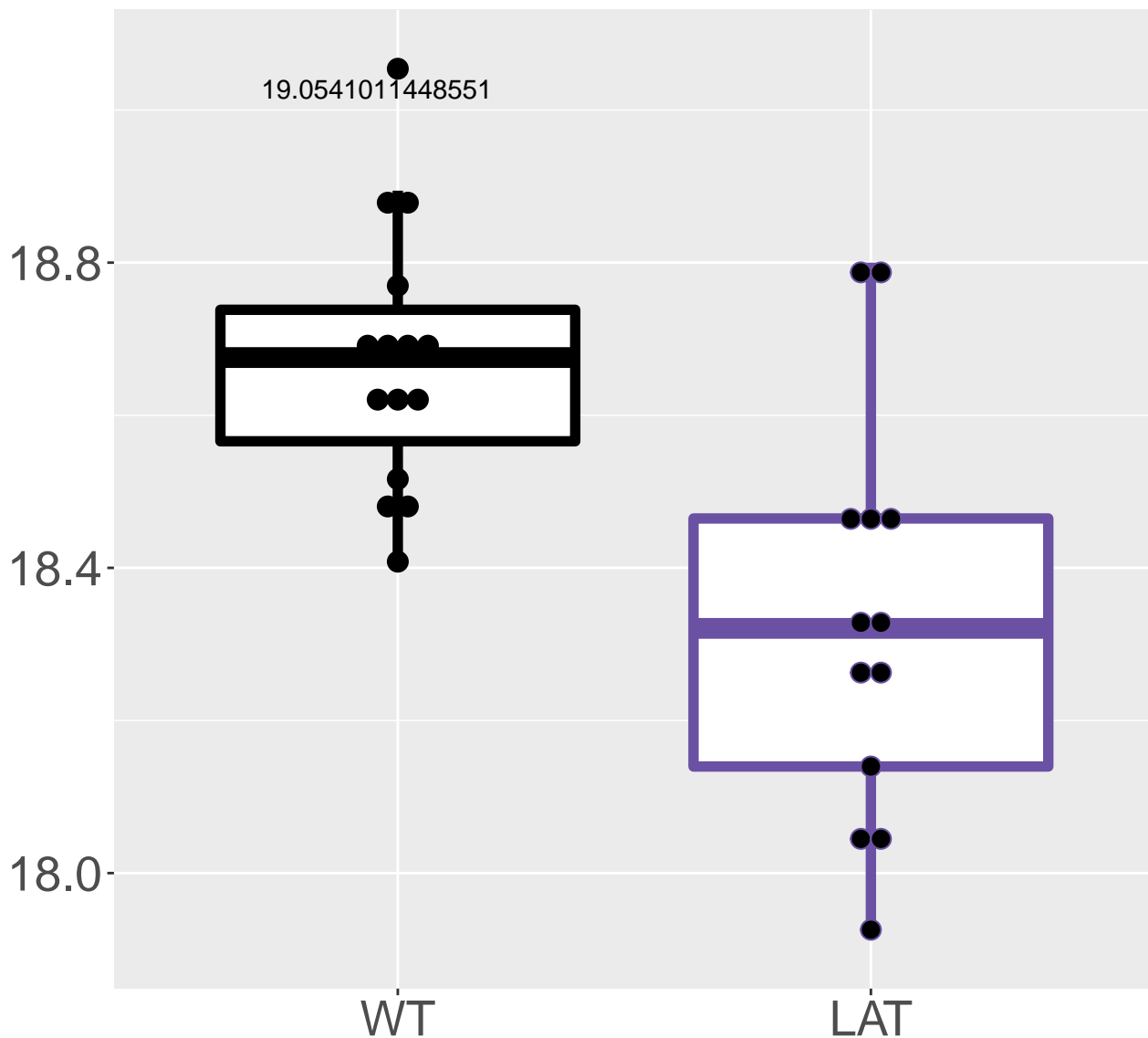
**M957.2814T635.39**

**FDR = 0.005, FC = -0.53**



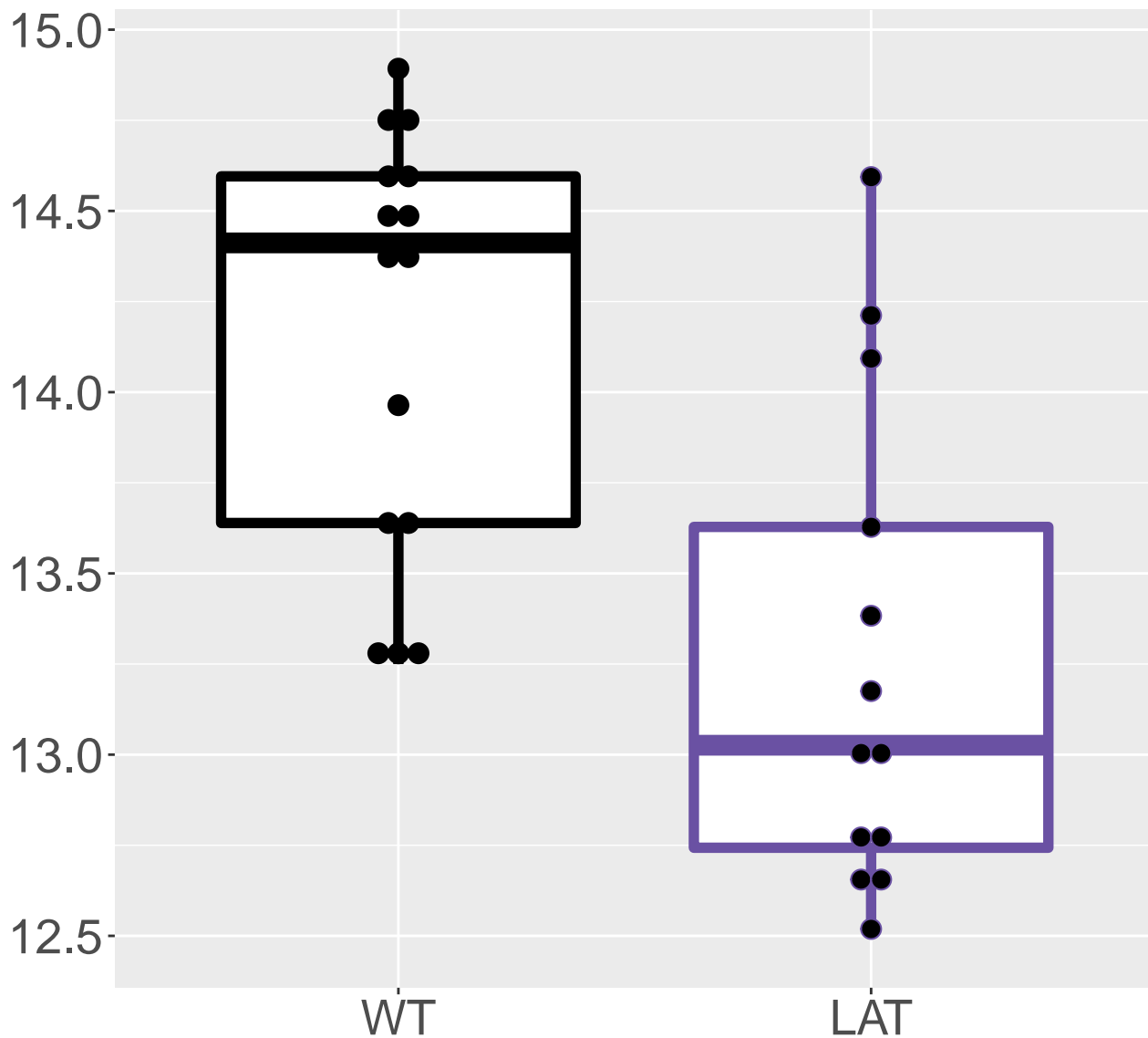
**M639.6829T600.66**

**FDR = 0.005, FC = -0.34**

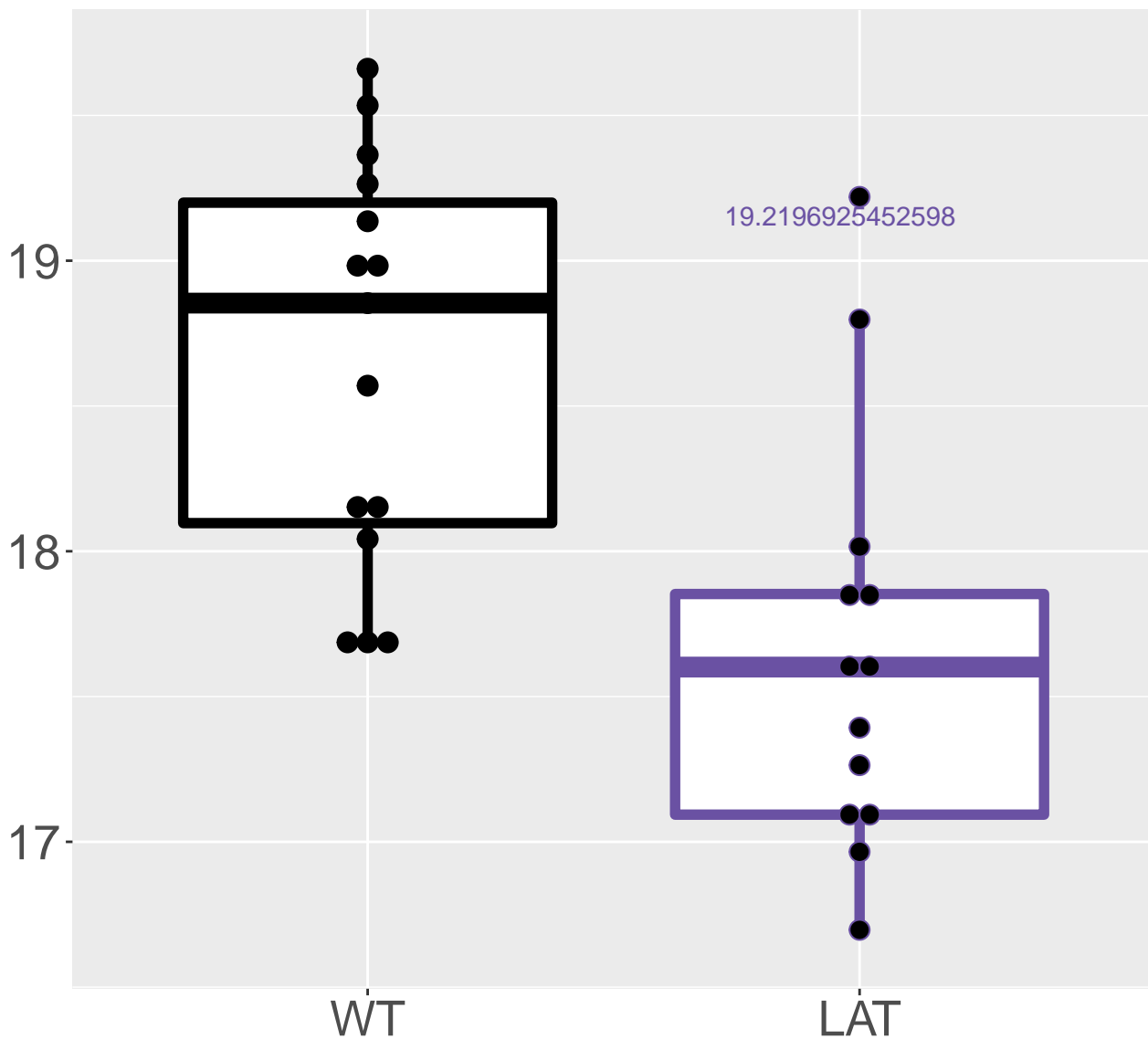


**M630.6775T621.84**

**FDR = 0.0051, FC = -0.89**

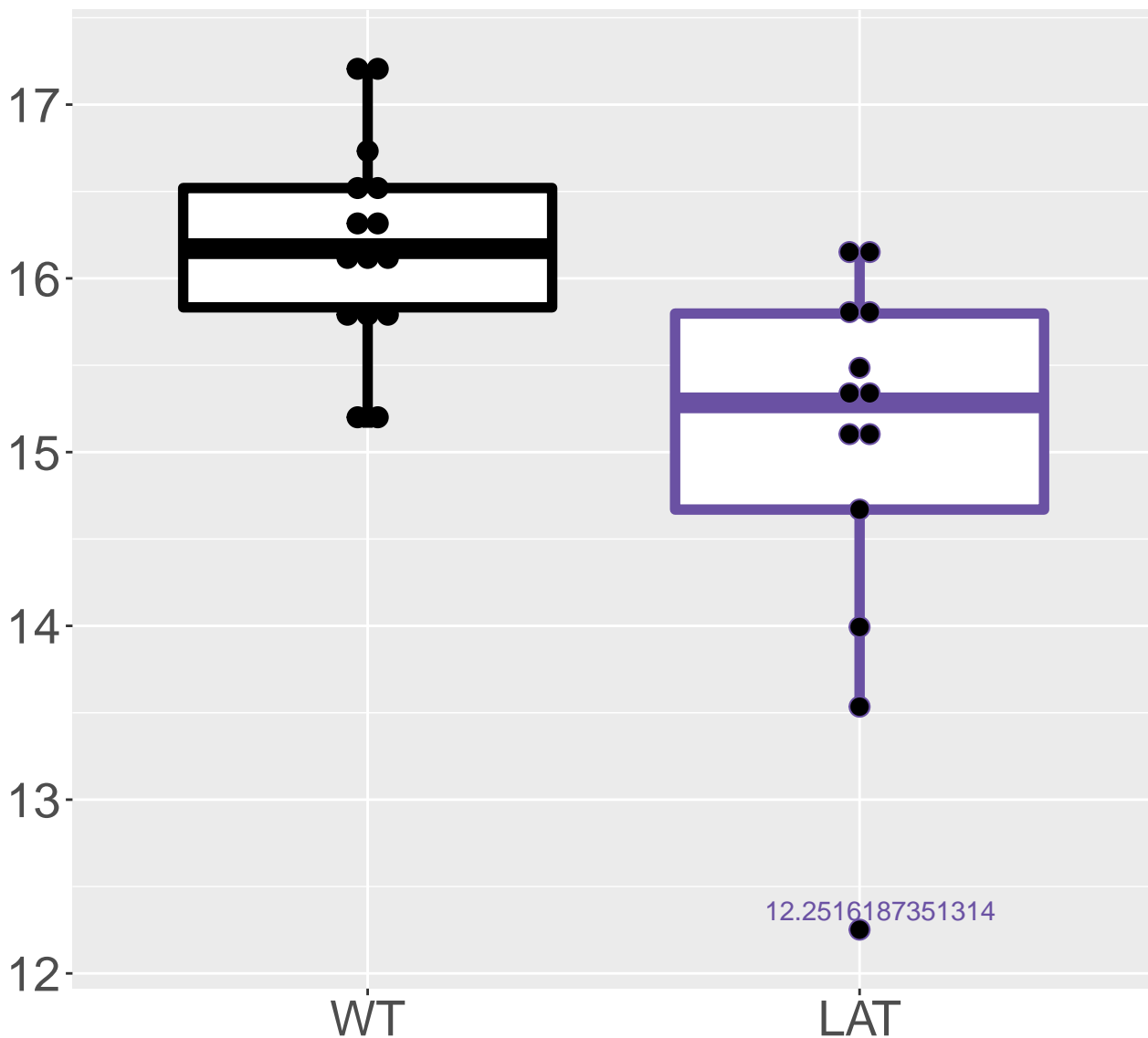


**M385.6064T590.44\_1**  
**FDR = 0.0052, FC = -1**



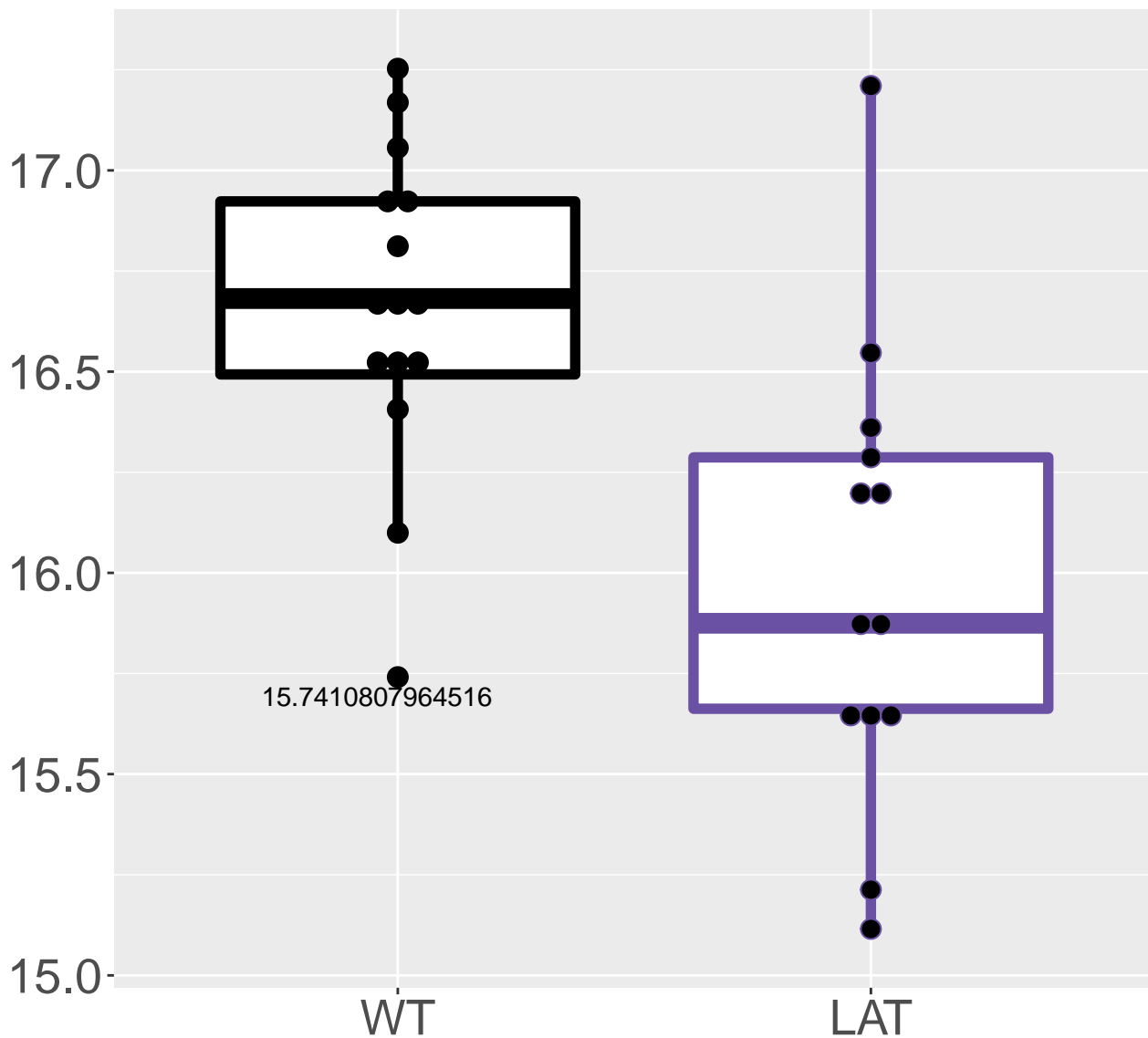
**M619.2722T210.88**

**FDR = 0.0052, FC = -1.2**



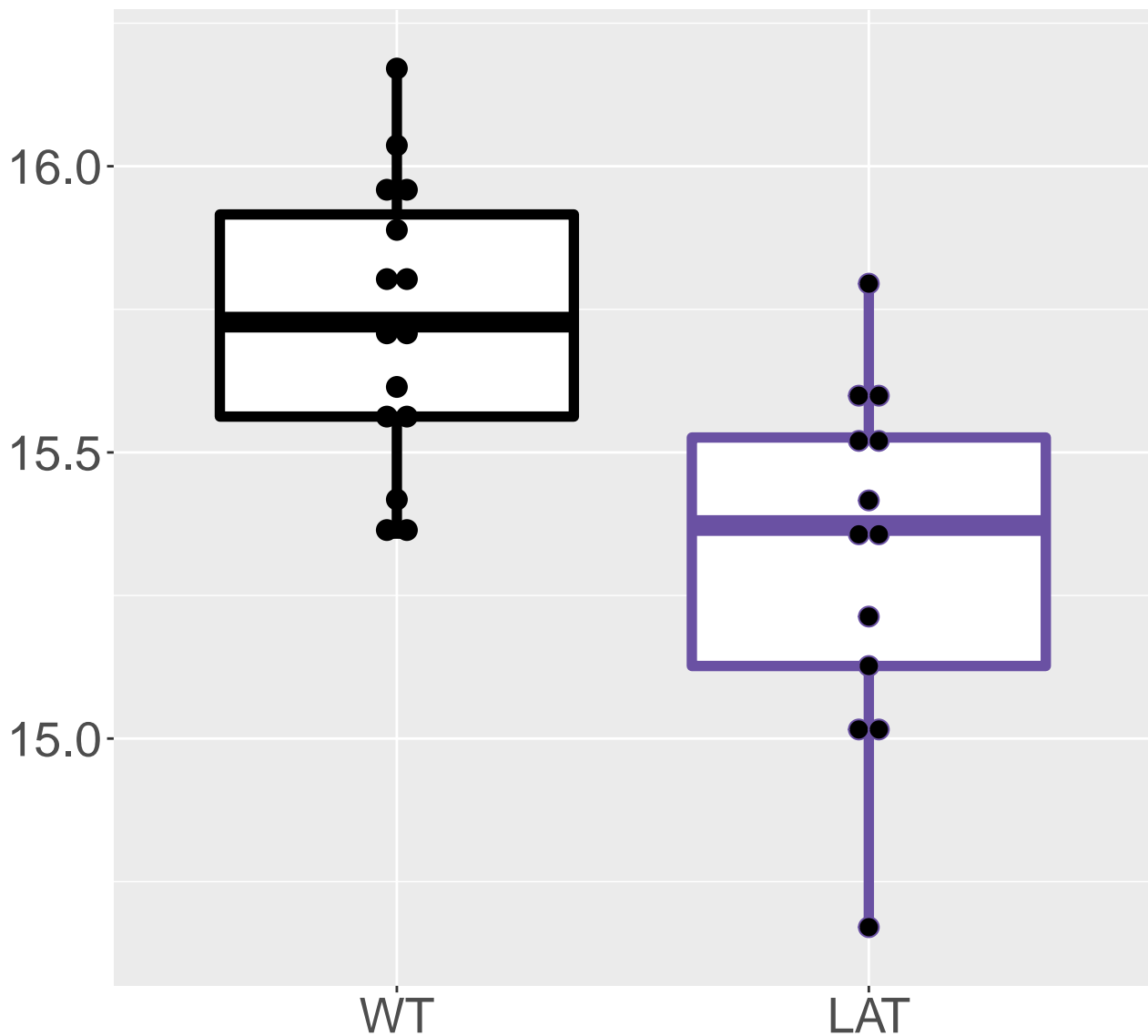
**M344.1169T537**

**FDR = 0.0052, FC = -0.68**



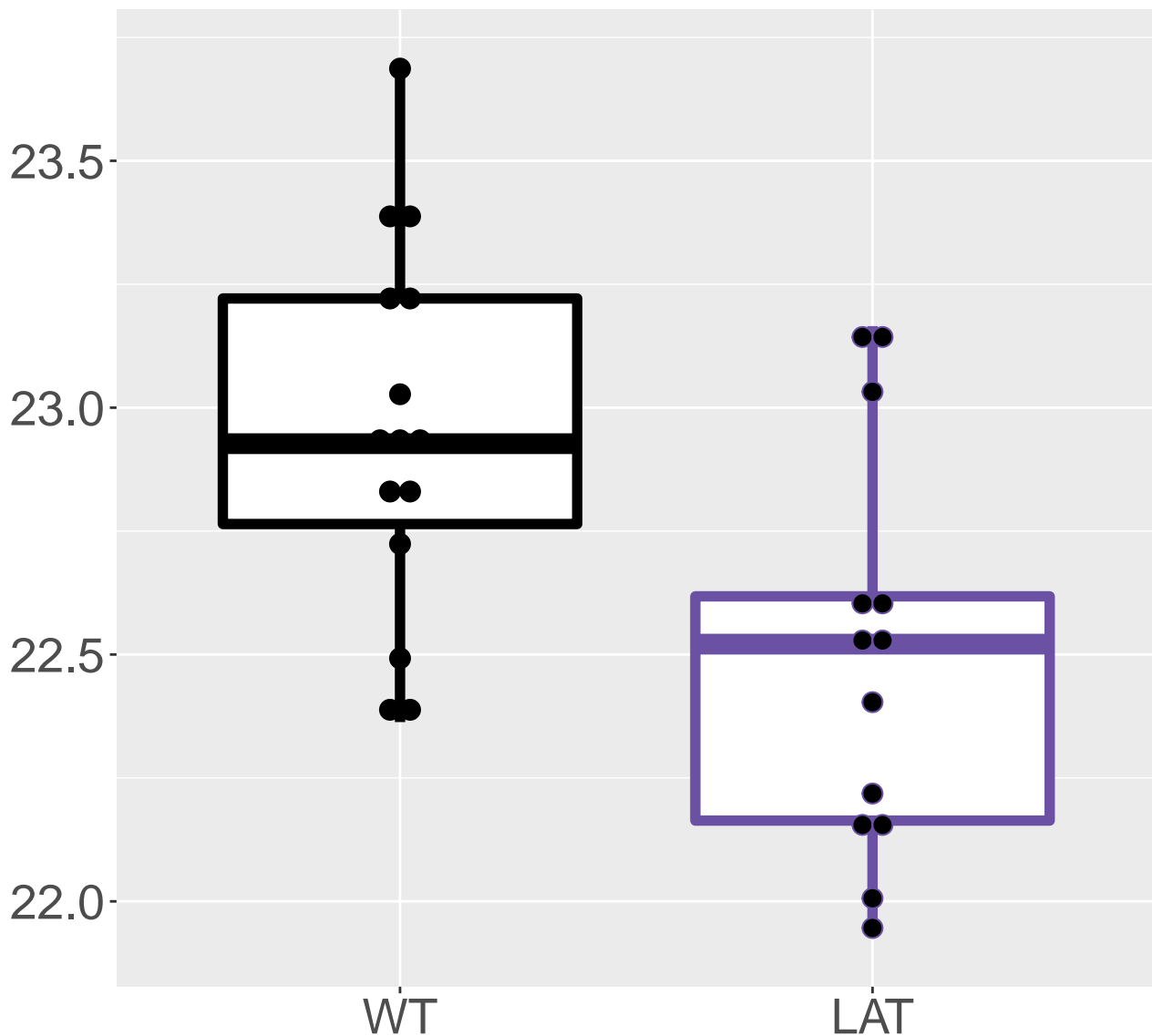
**M713.1998T588.41**

**FDR = 0.0053, FC = -0.4**



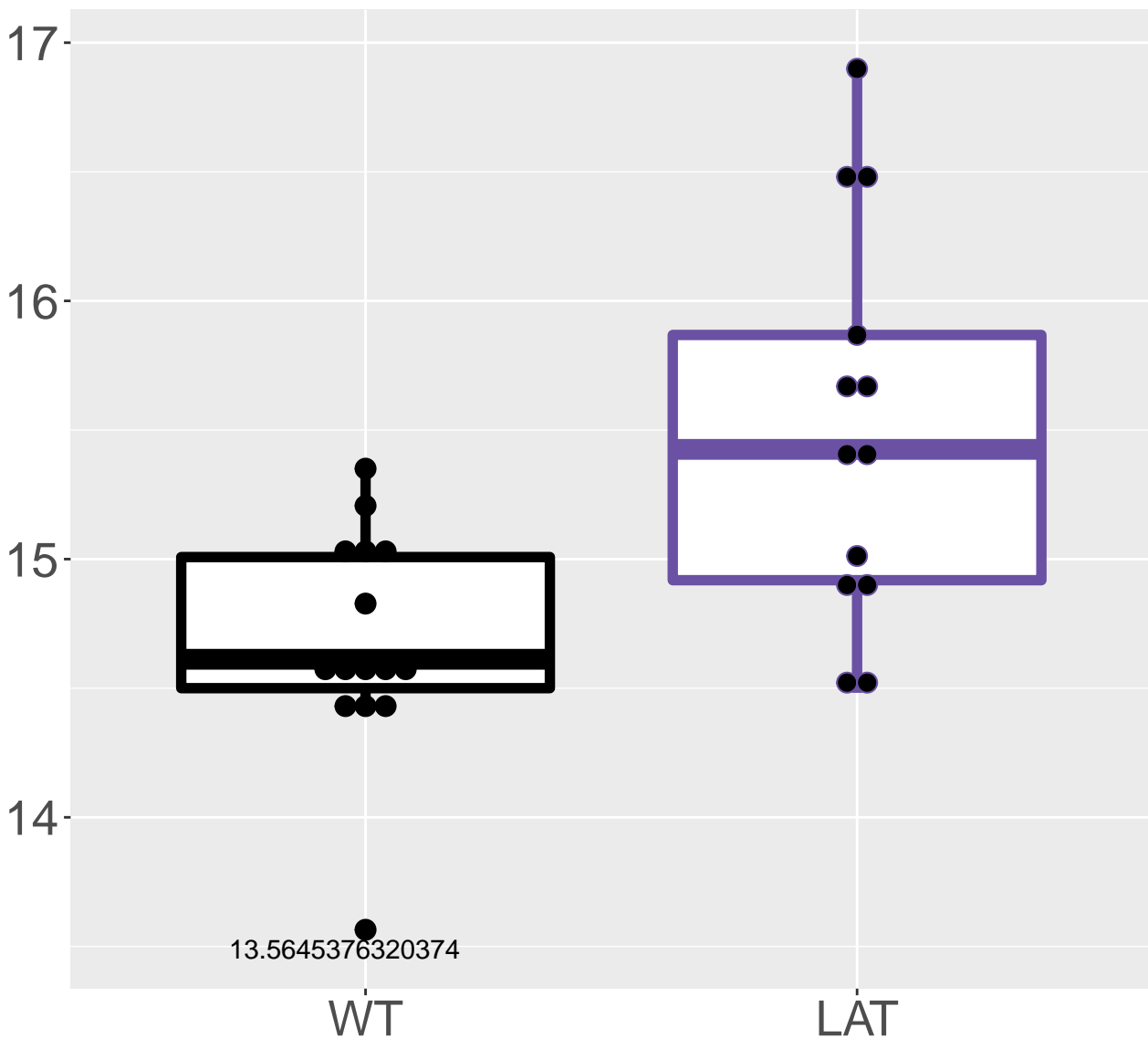


**cis-5,8,11,14,17-Eicosapentaenoic acid;Eicos**  
**FDR = 0.0054, FC = -0.46**



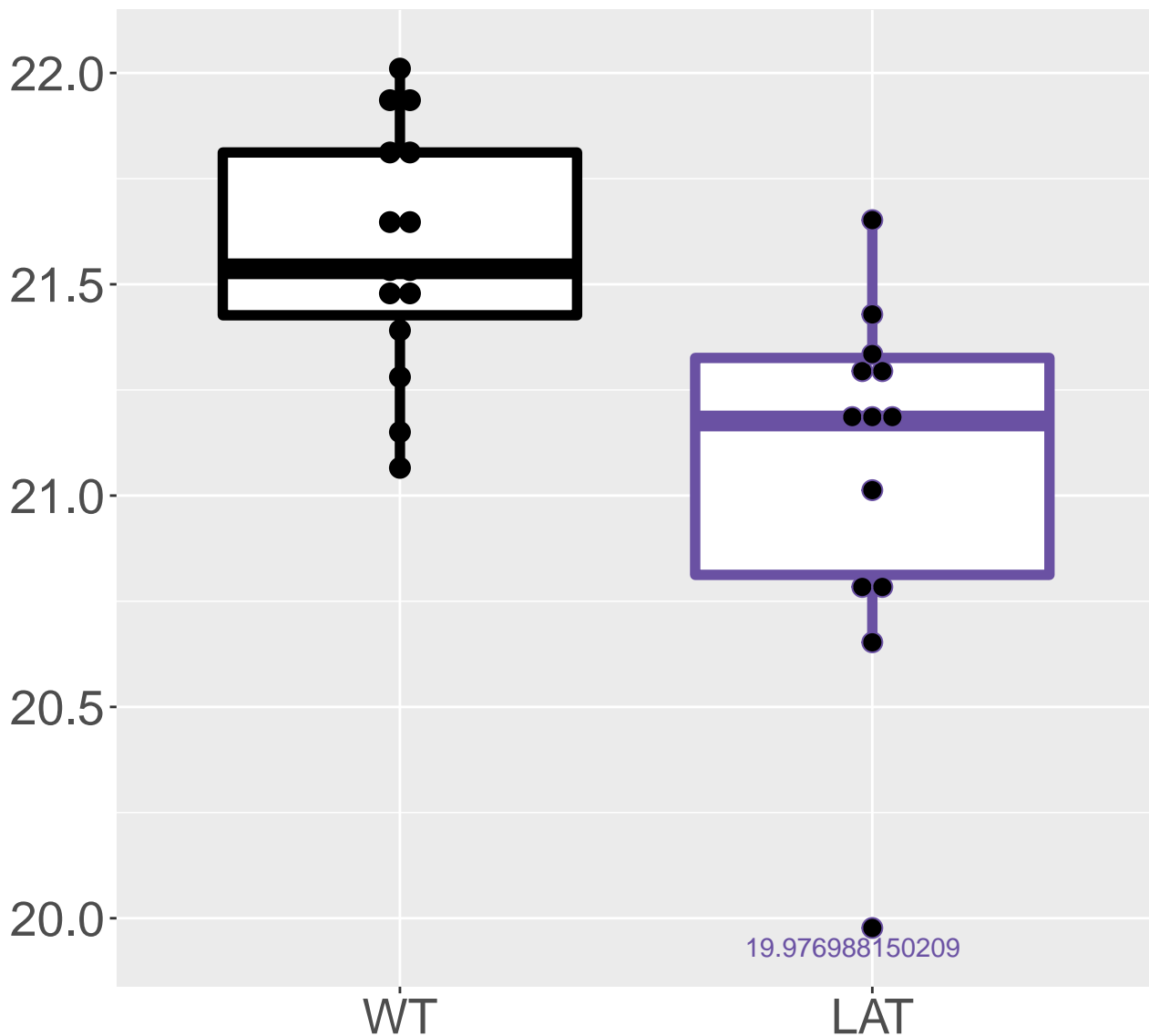
**M352.0462T638.18**

**FDR = 0.0056, FC = 0.84**



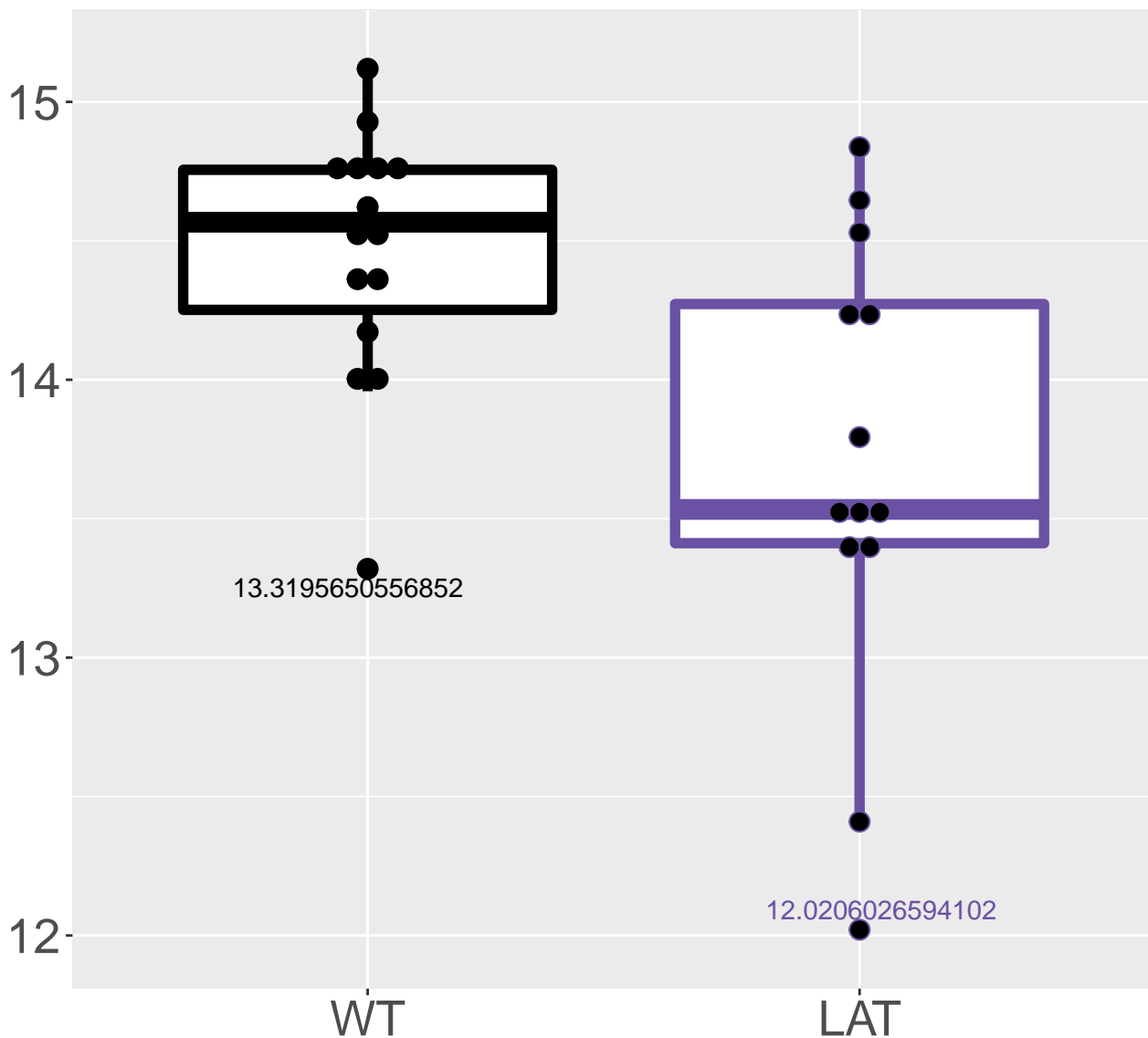
**M264.0741T272.63**

**FDR = 0.0056, FC = -0.52**



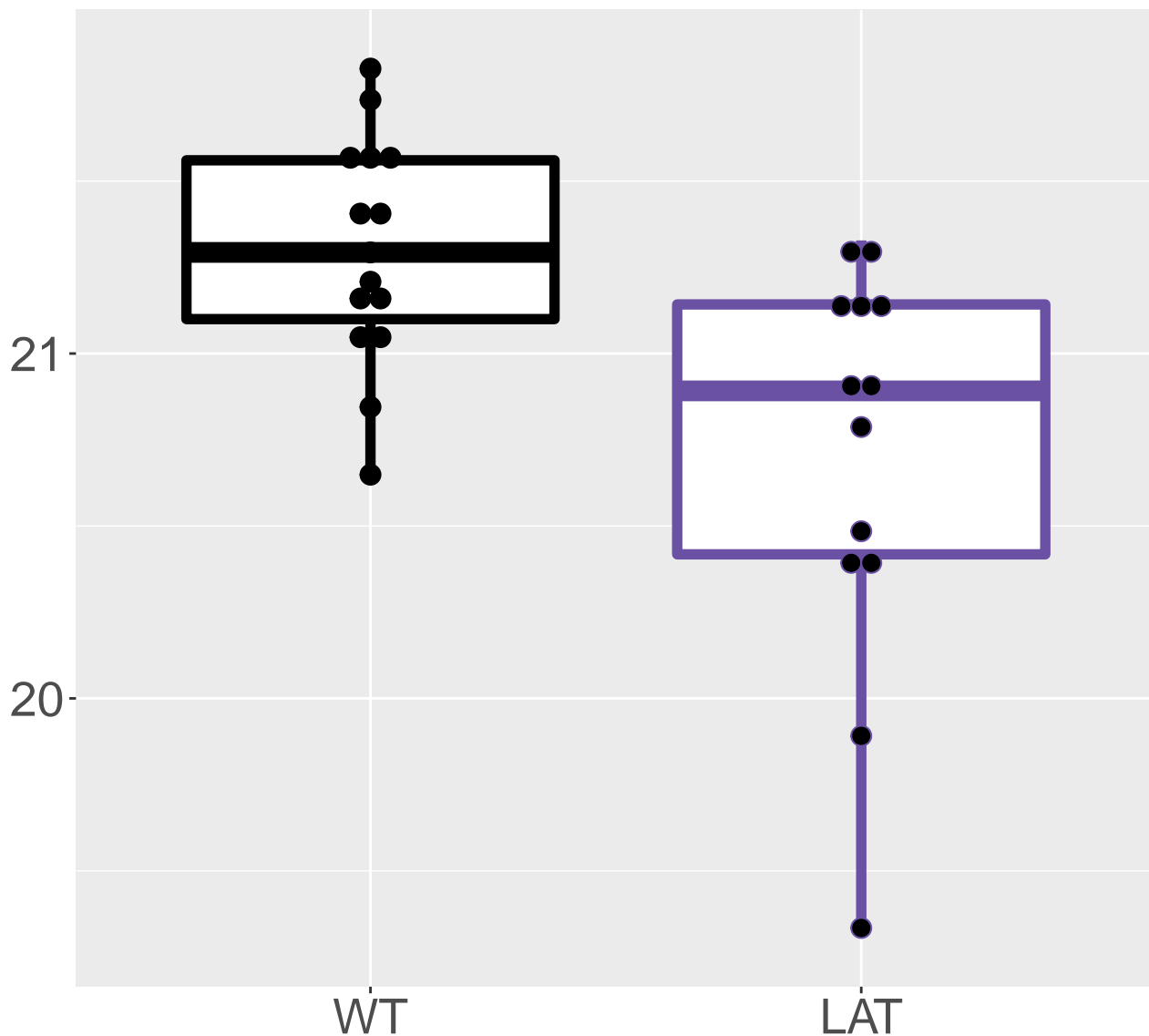
**M624.1452T507.98**

**FDR = 0.0057, FC = -0.77**



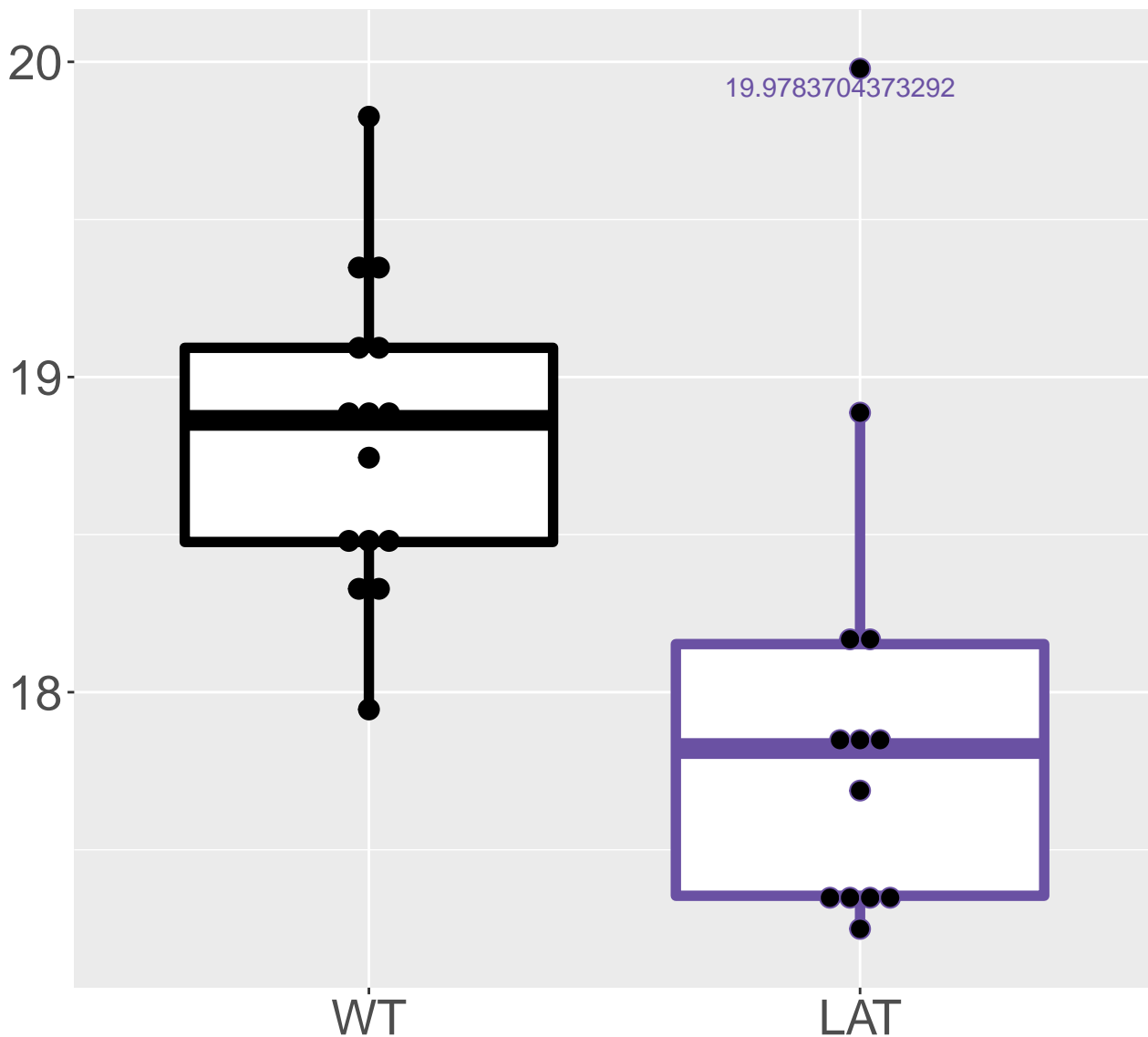
**M310.097T302.36**

**FDR = 0.0057, FC = -0.6**



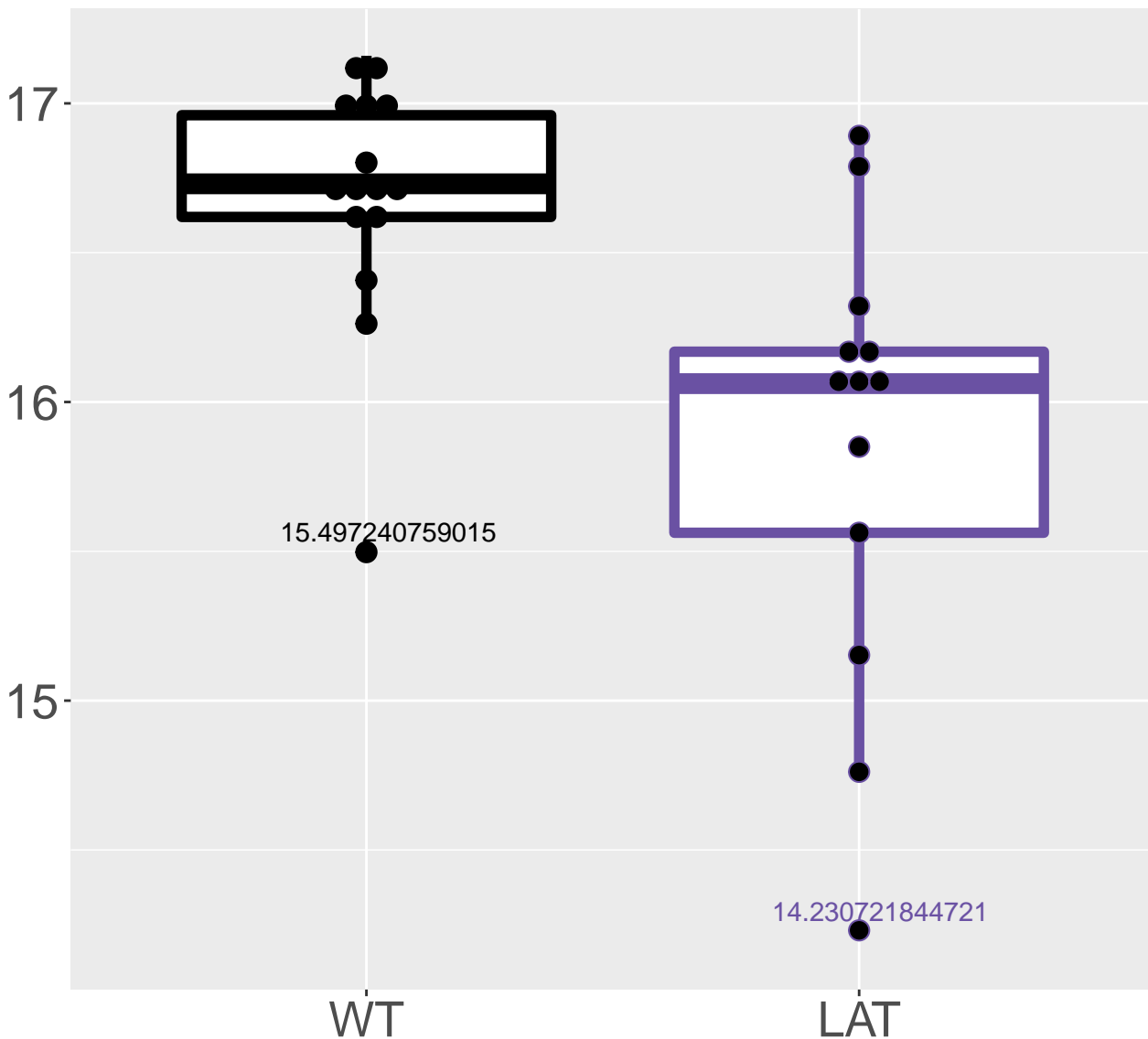
**M899.2882T682.45**

**FDR = 0.0057, FC = -0.88**



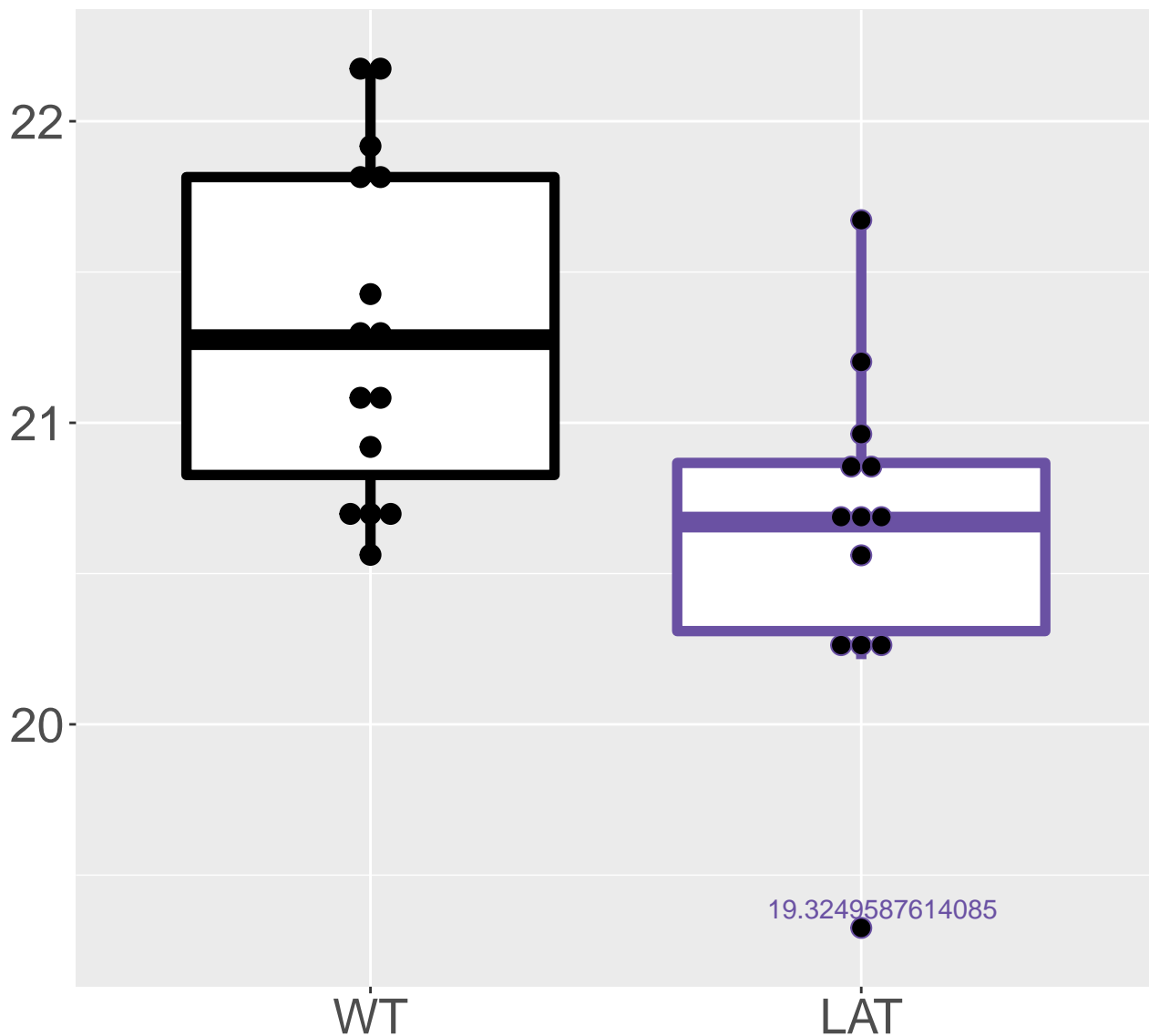
**M171.0083T393.82**

**FDR = 0.0057, FC = -0.83**



**M535.4737T78.29**

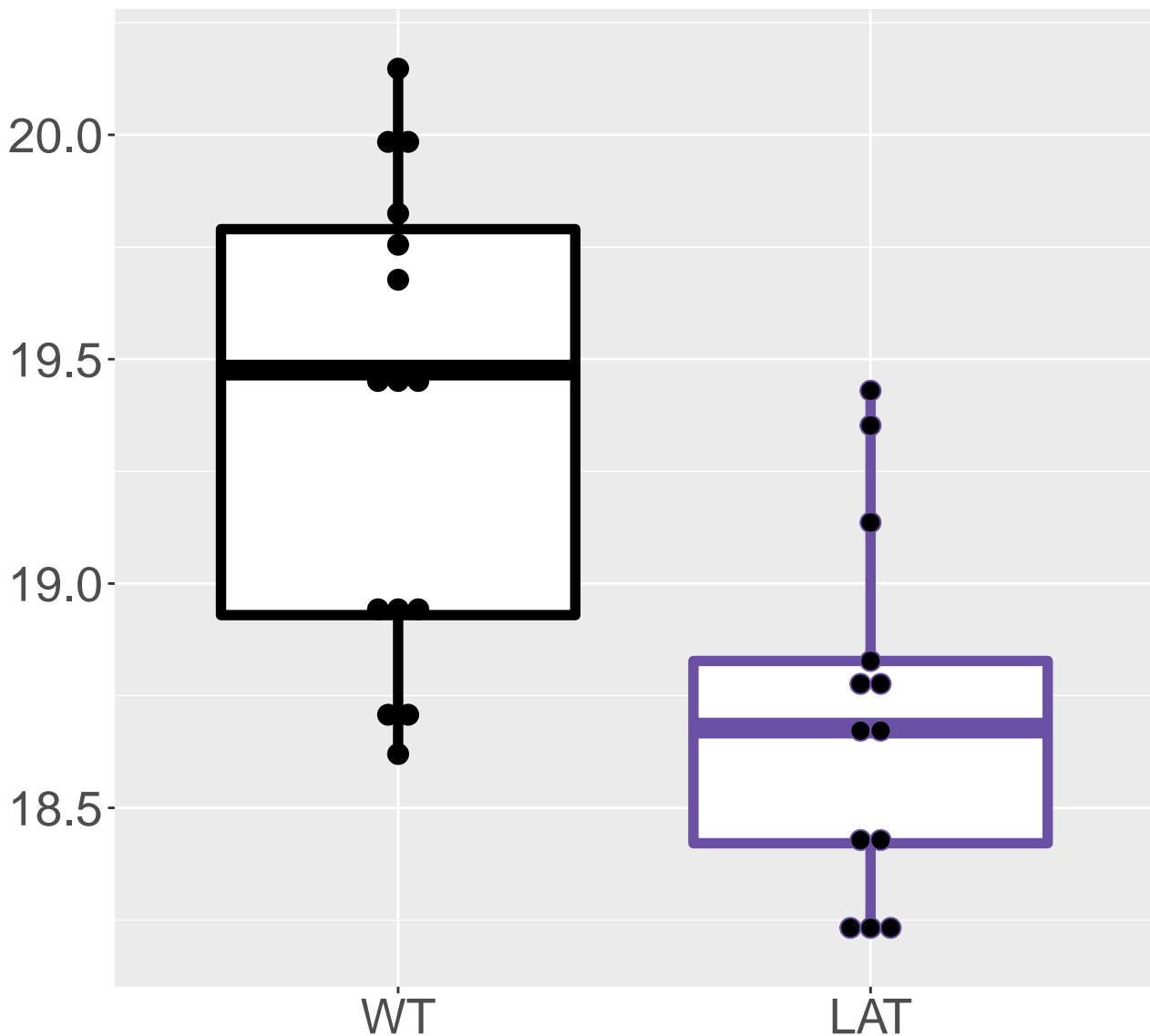
**FDR = 0.0057, FC = -0.67**





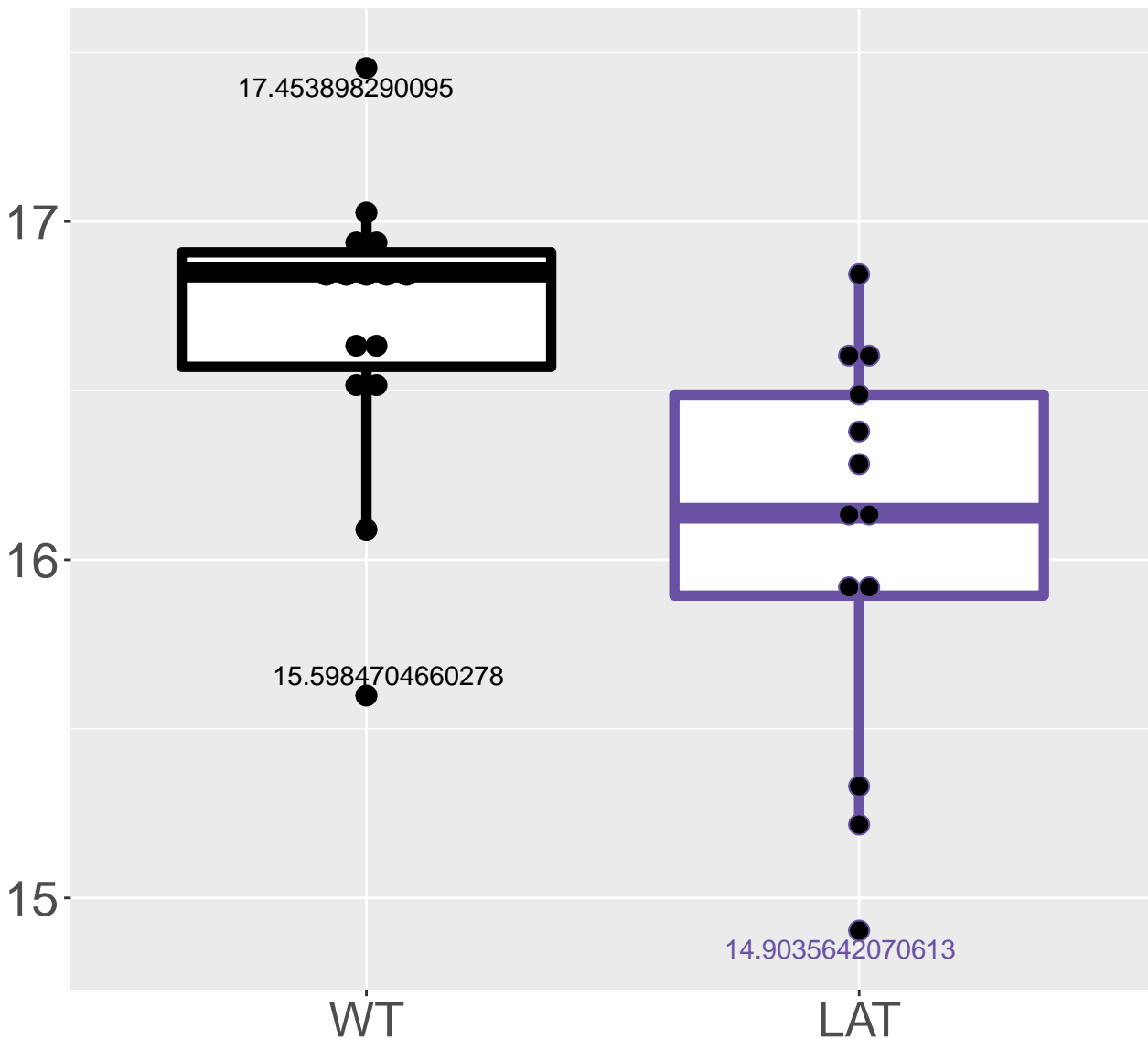
**M610.1666T572.83**

**FDR = 0.0057, FC = -0.67**



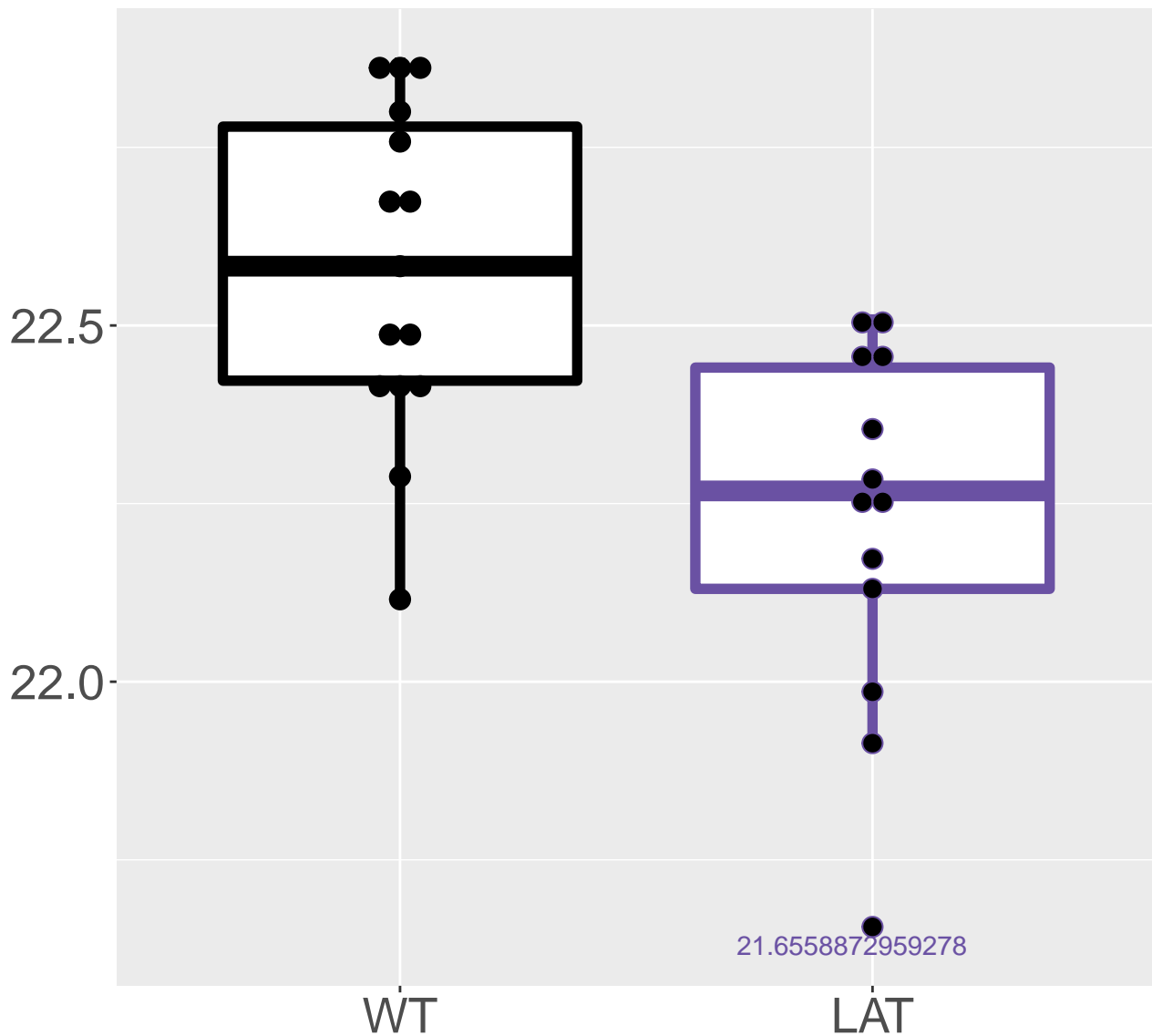
**M351.1331T174.06**

**FDR = 0.0057, FC = -0.65, sex\***



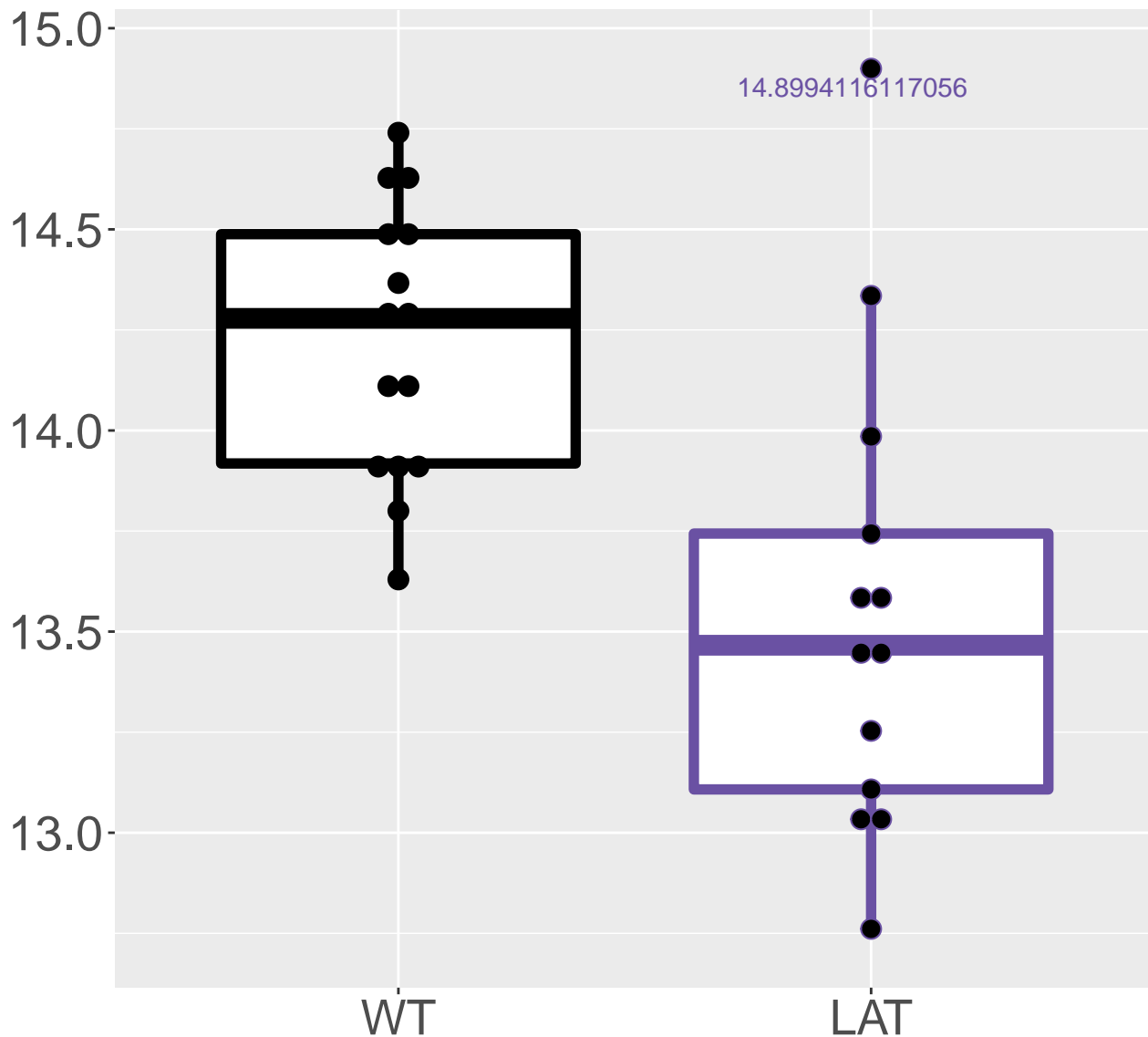
**M129.0388T279.8**

**FDR = 0.0057, FC = -0.36**



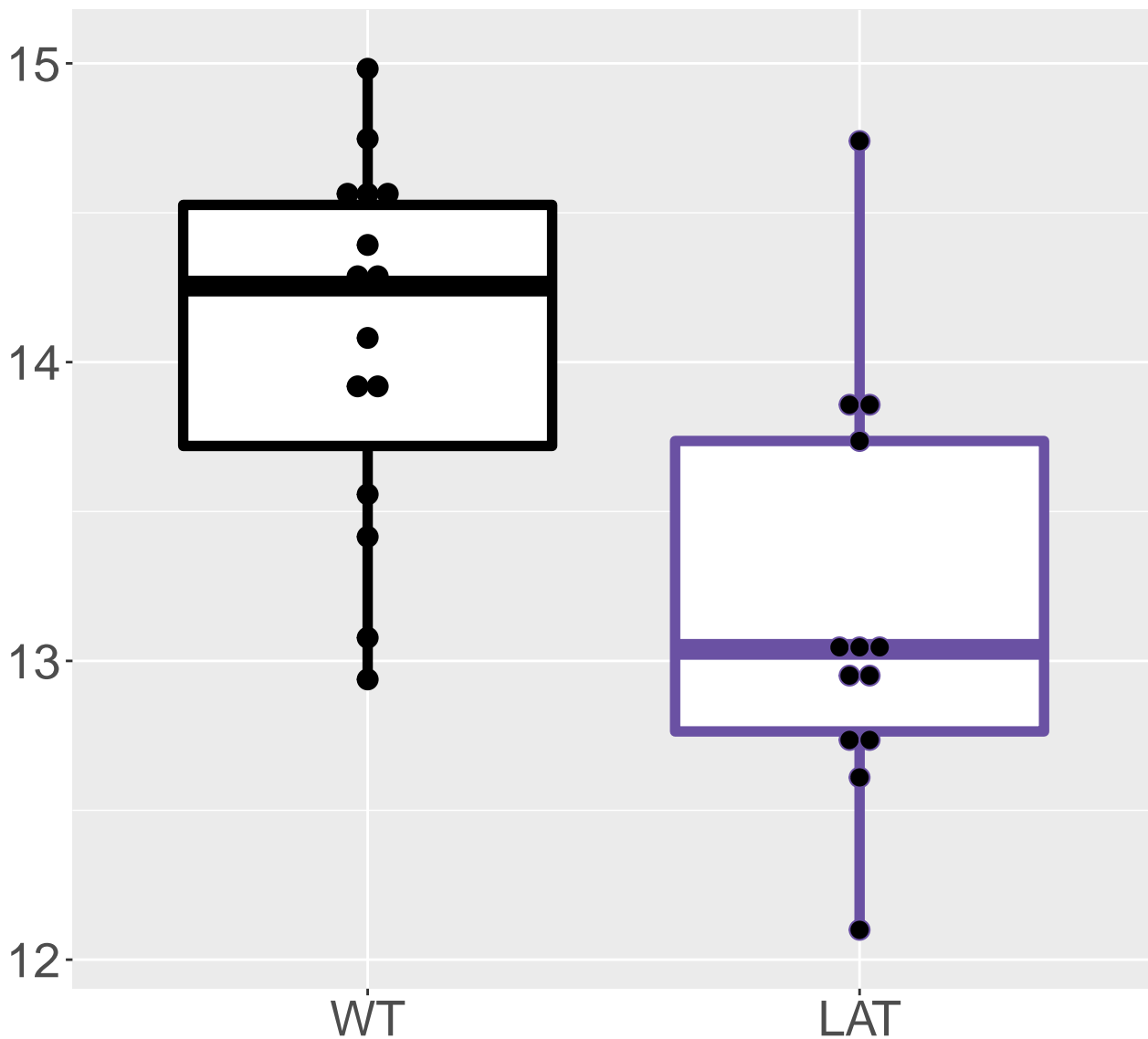
**M948.2759T683.75**

**FDR = 0.0057, FC = -0.66**



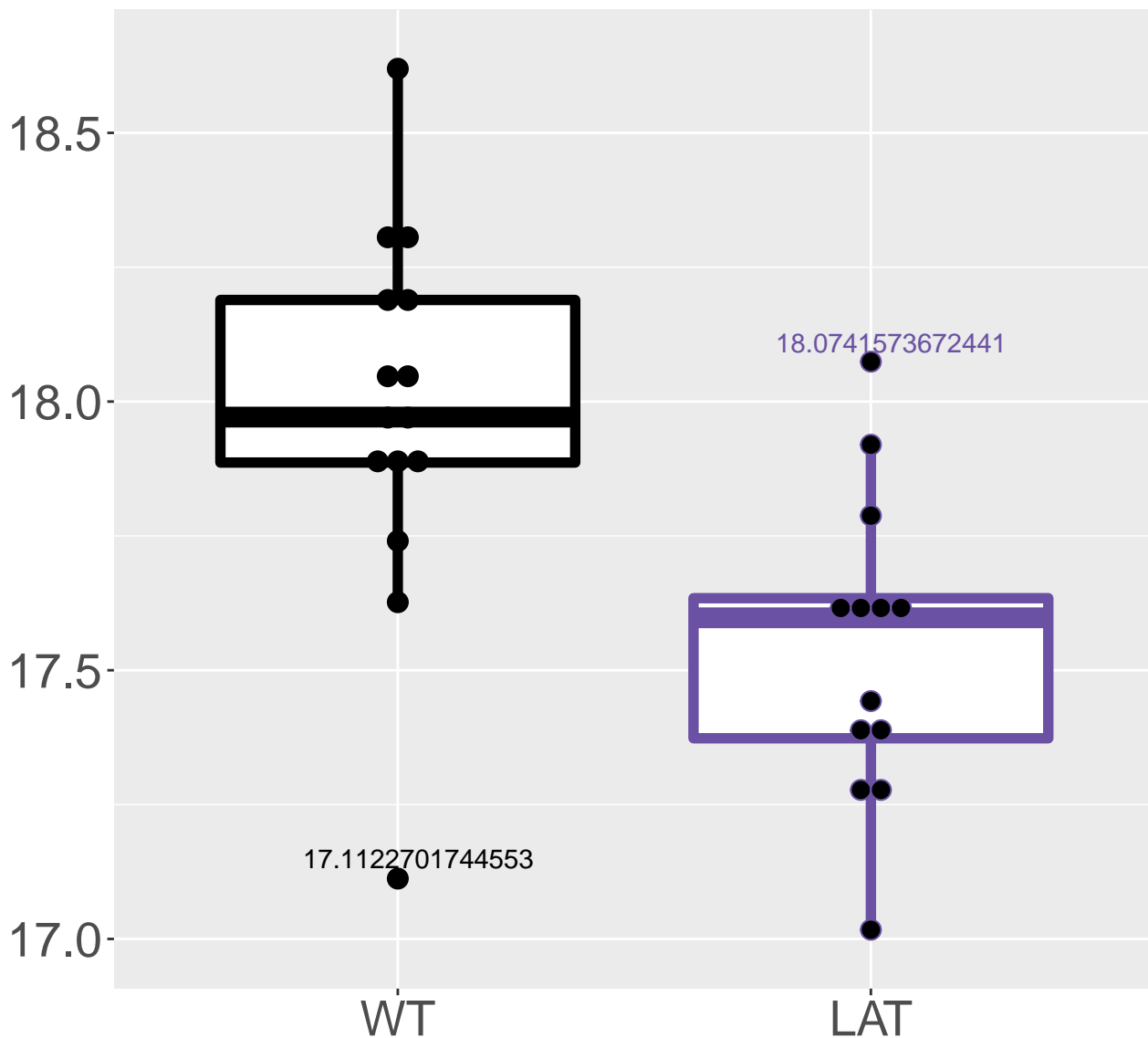
**M598.1864T650.34**

**FDR = 0.0059, FC = -0.9**



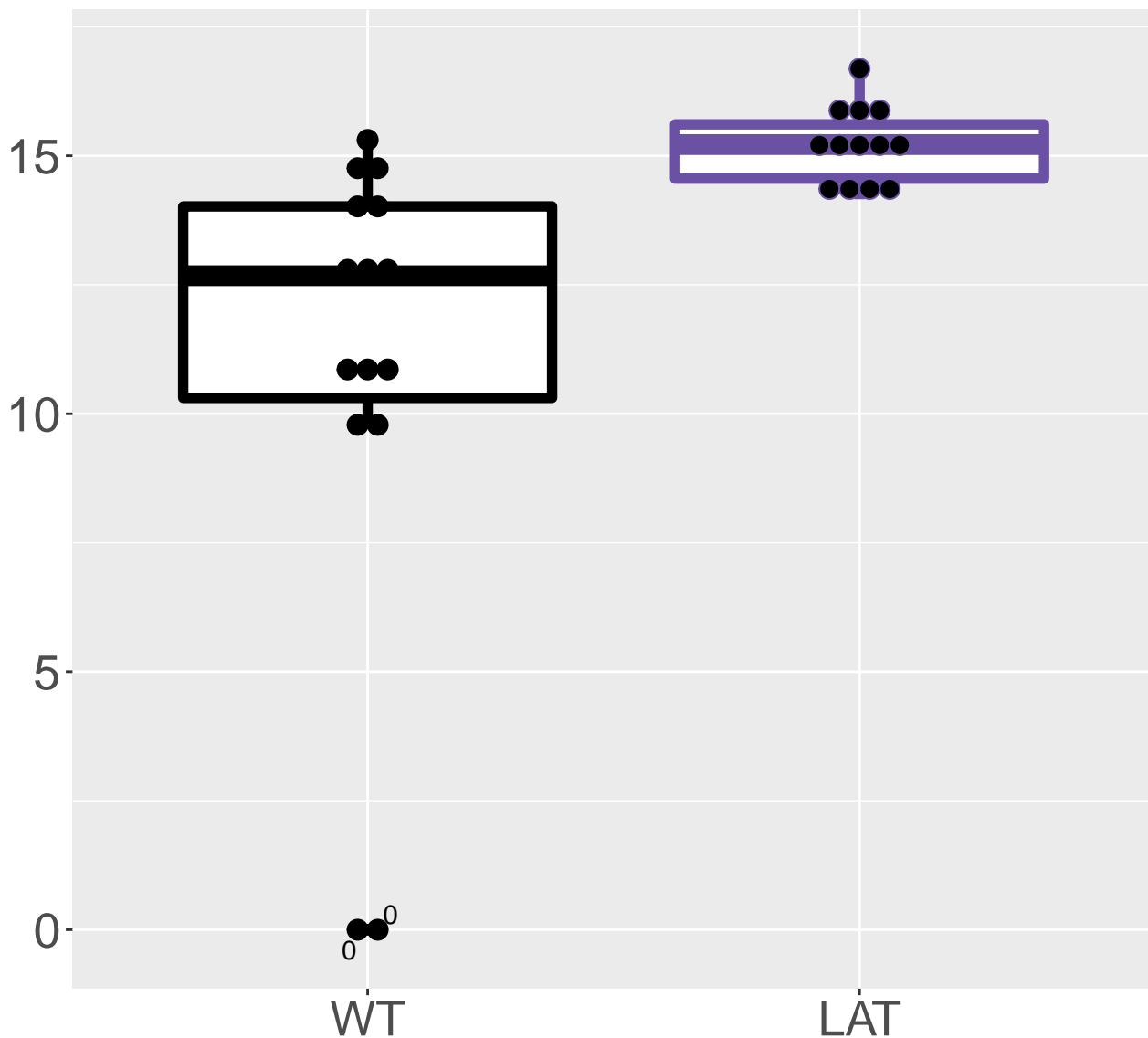
**M290.0998T426.79**

**FDR = 0.0059, FC = -0.45**



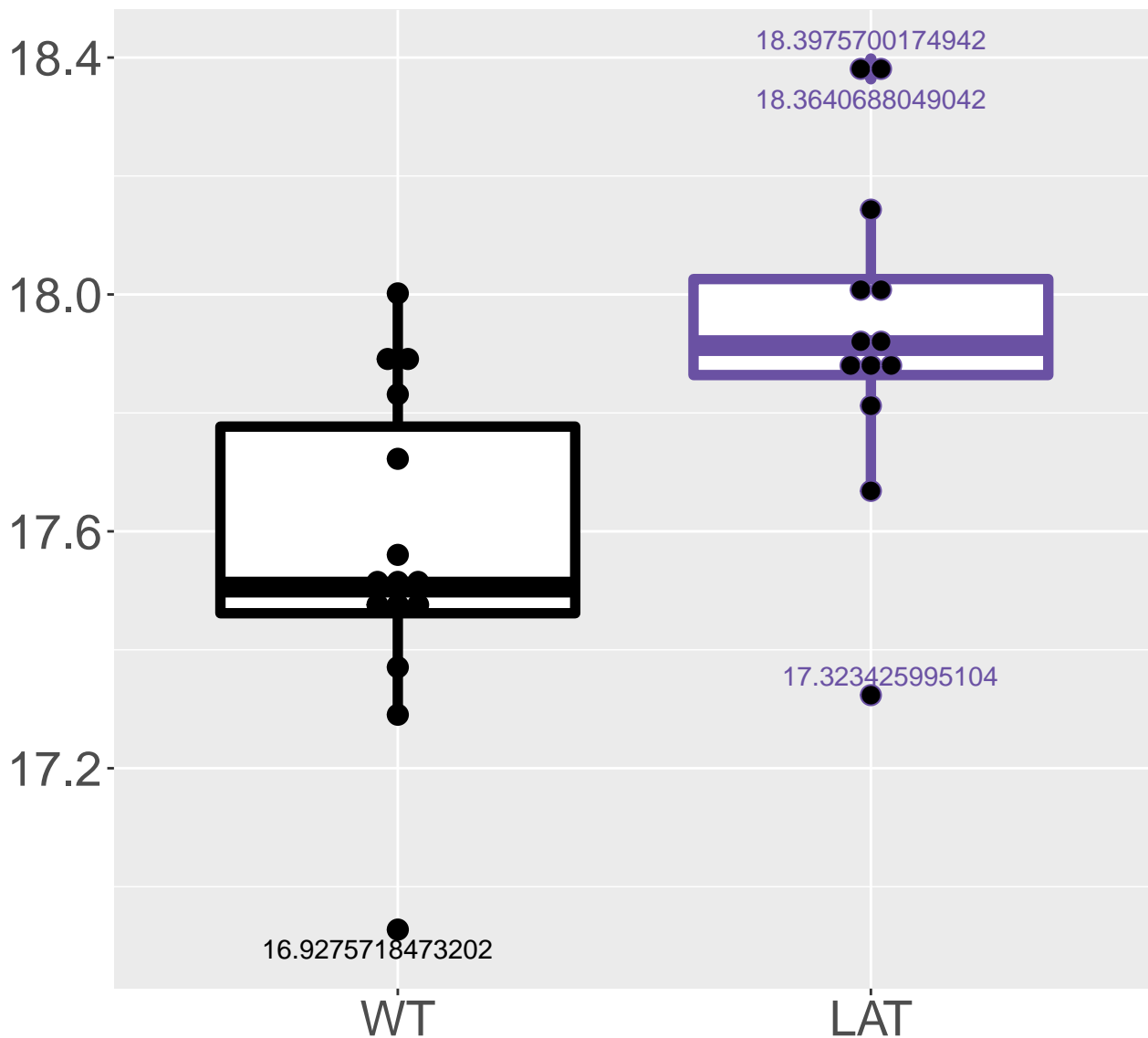
**M365.0493T527.08**

**FDR = 0.0061, FC = 4.3**



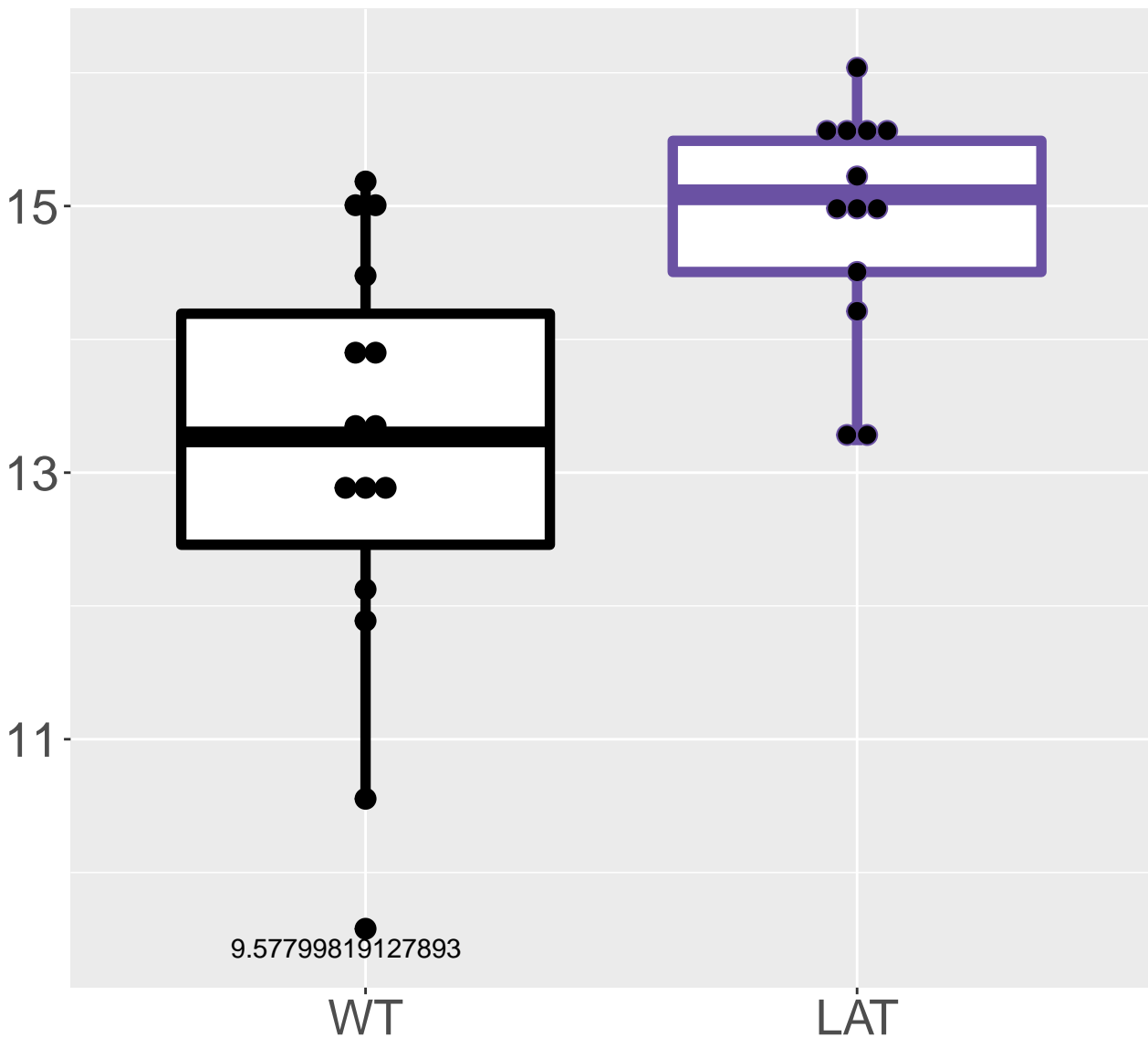
**M137.0407T585.11**

**FDR = 0.0064, FC = 0.38**



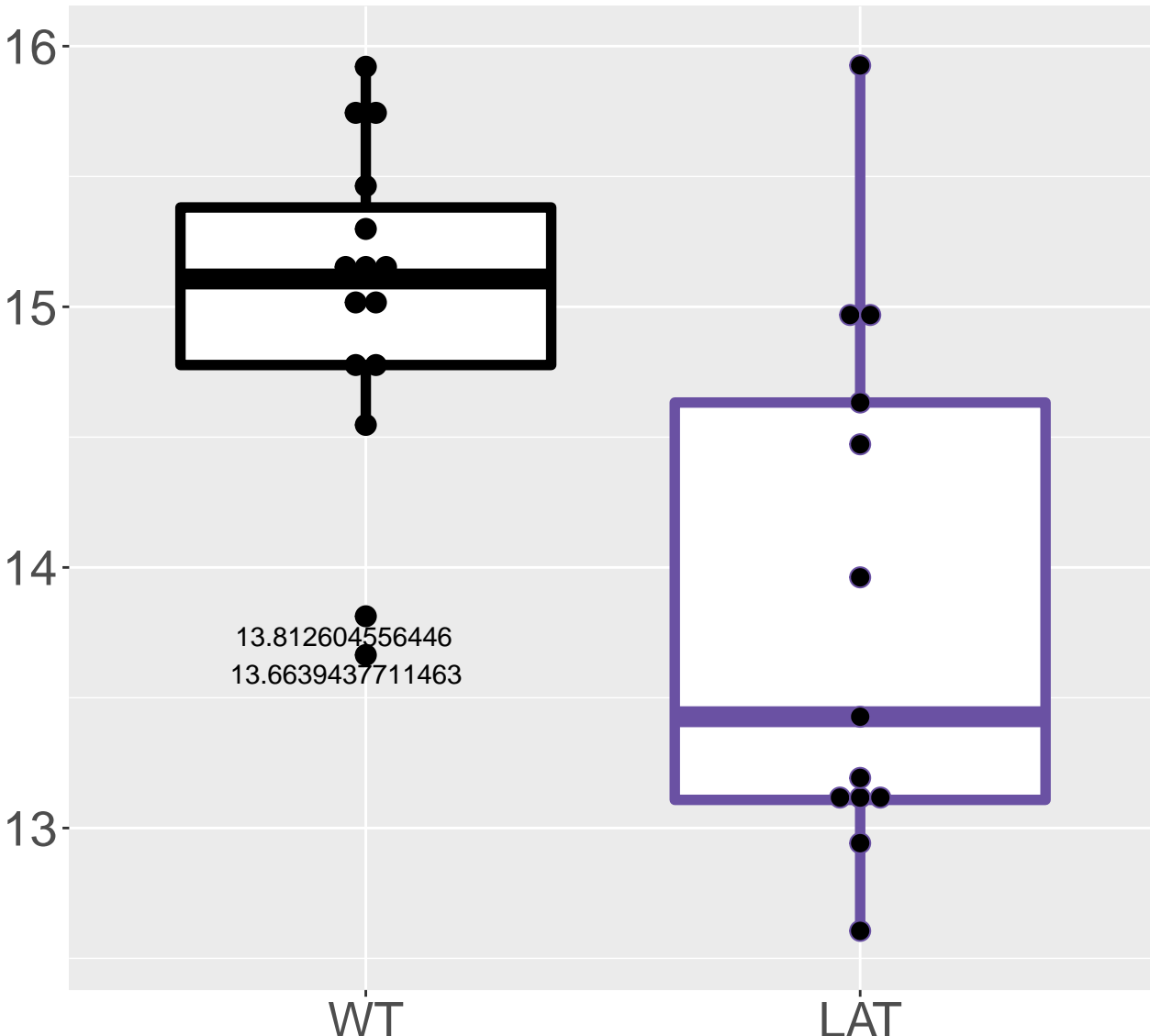


**M316.1055T199.04**  
**FDR = 0.0065, FC = 1.8**



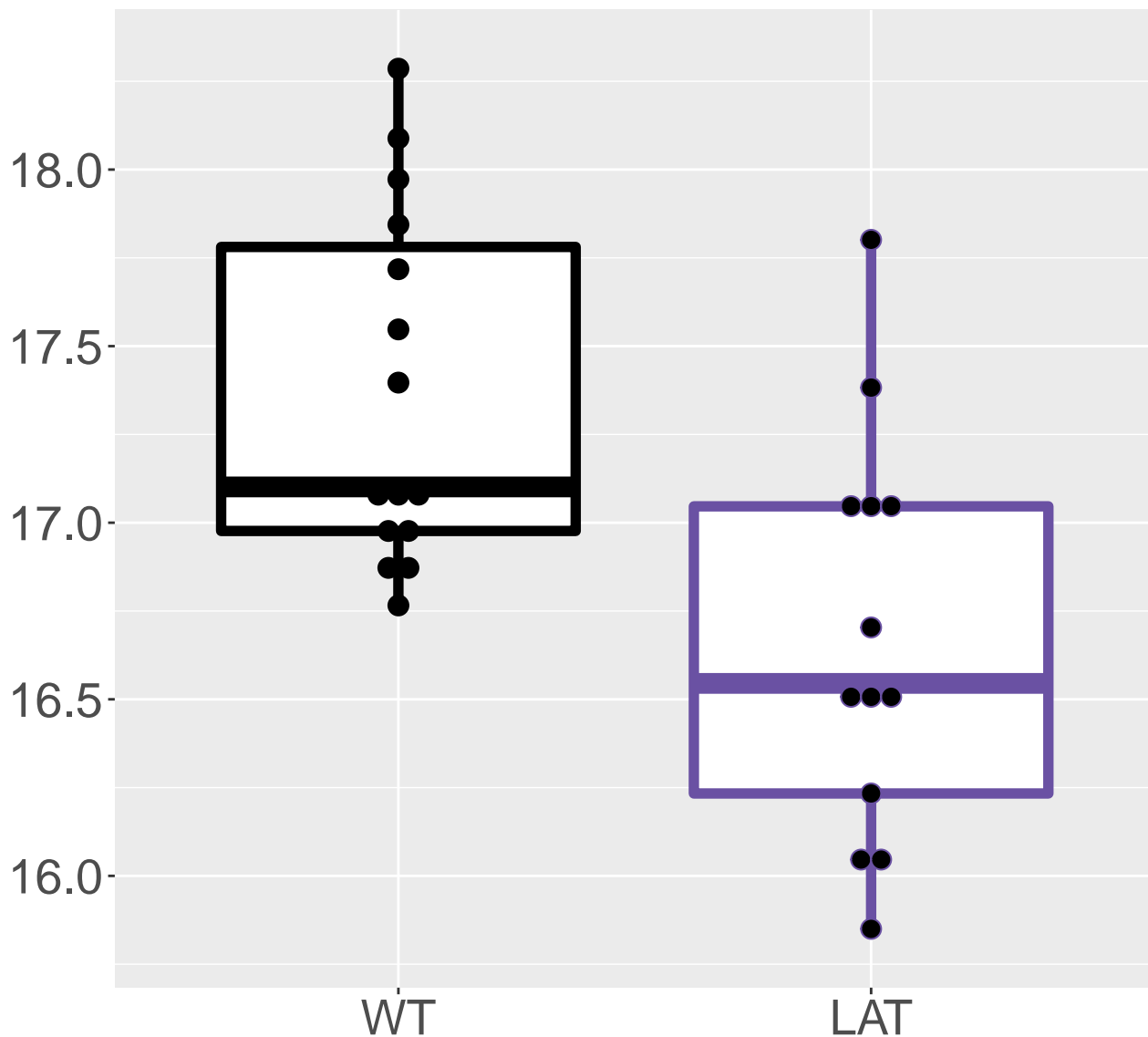
**M702.1952T608.79**

**FDR = 0.0065, FC = -1.1**



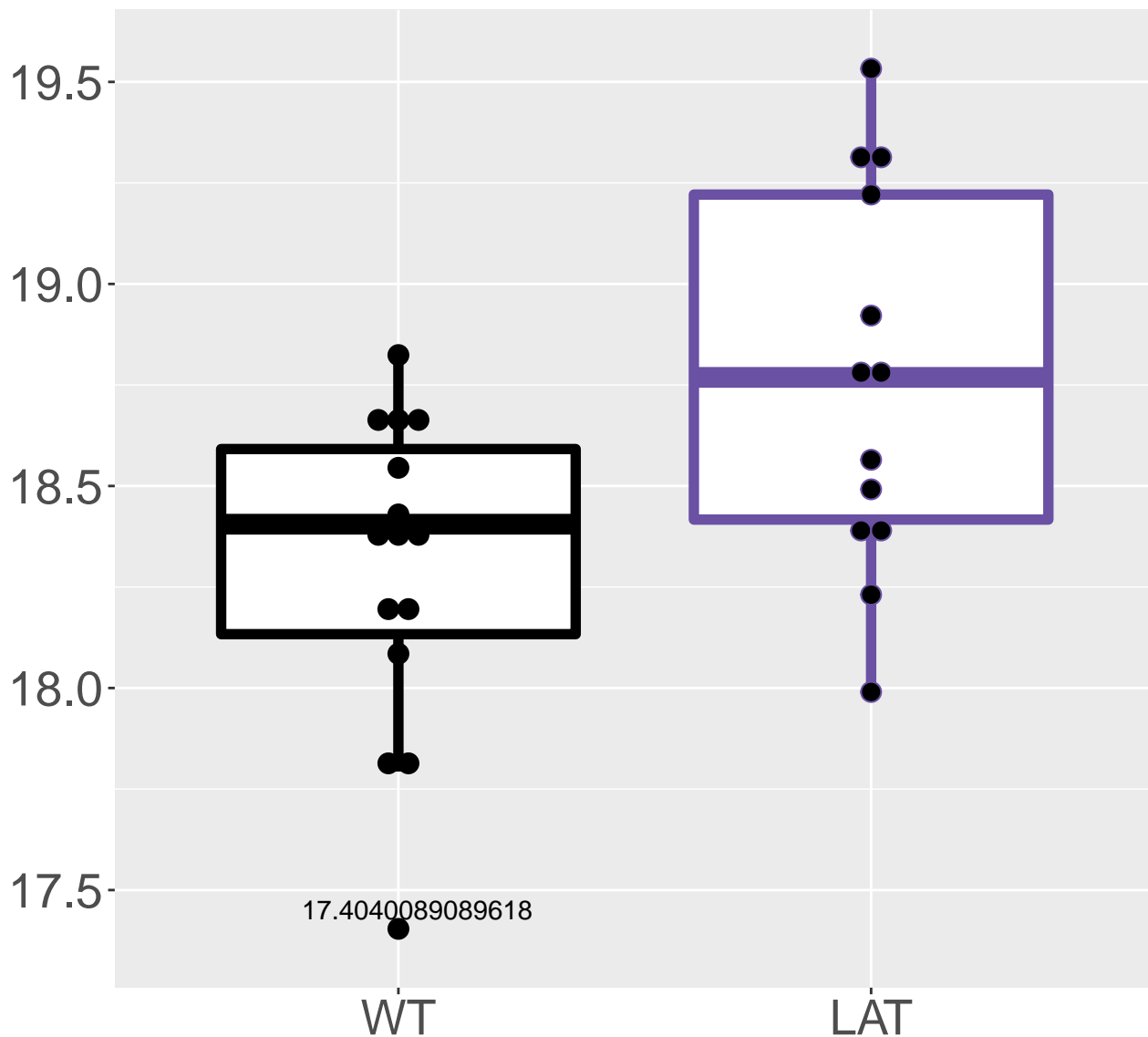
**M593.1954T577.38**

**FDR = 0.0065, FC = -0.7**



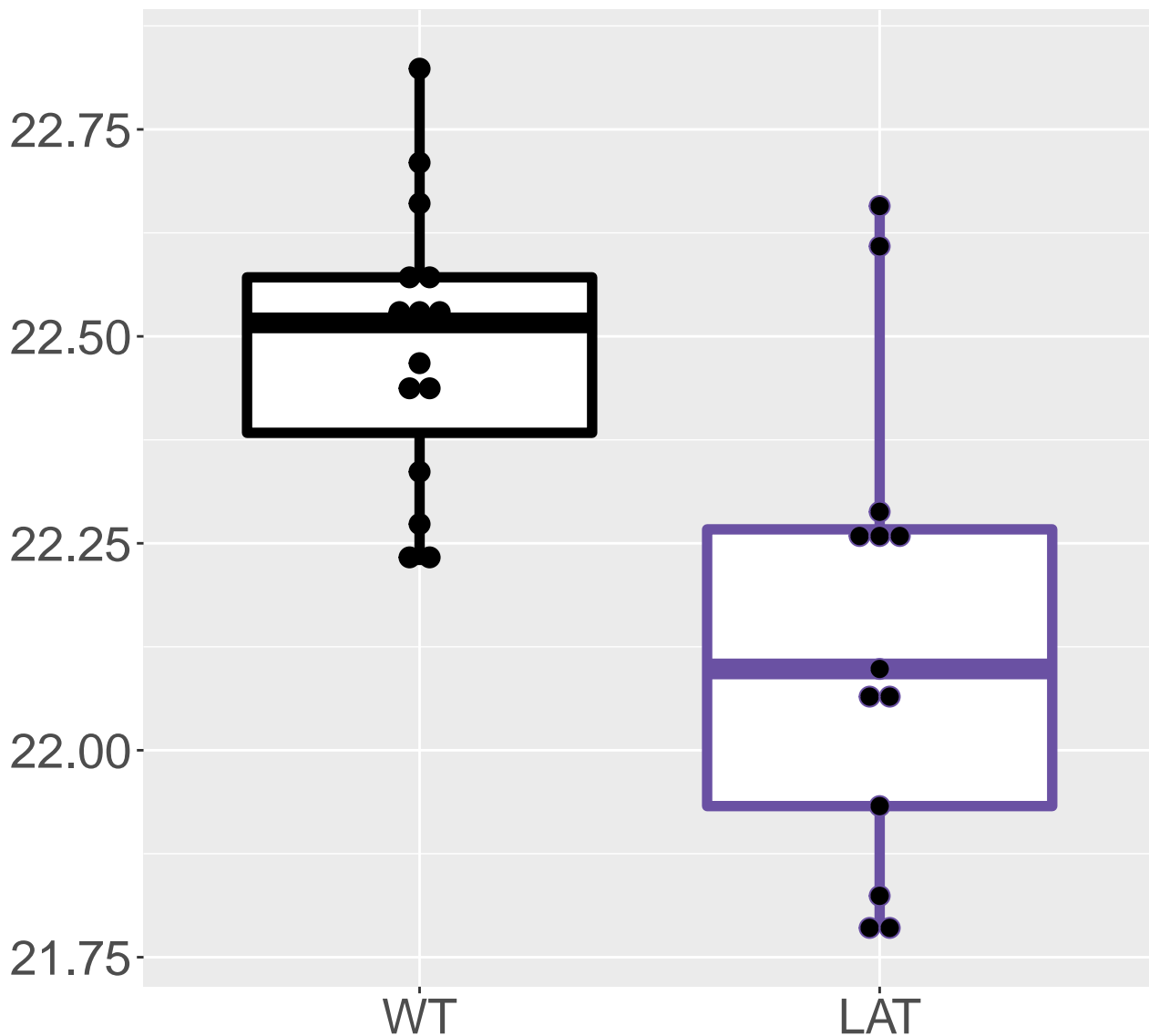
**M254.982T605.05**

**FDR = 0.0066, FC = 0.47, sex\***



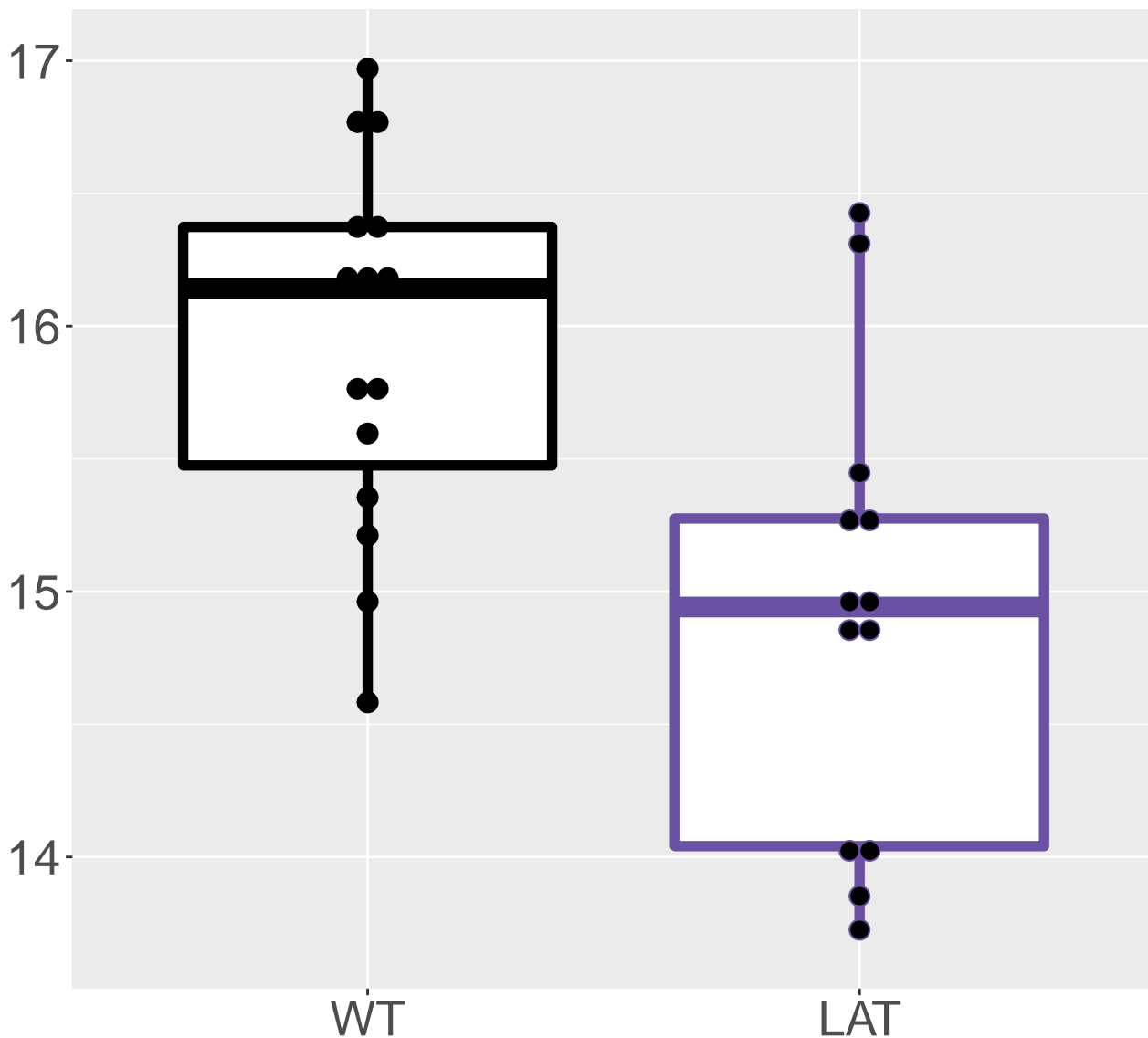
**M638.1808T600.65**

**FDR = 0.0066, FC = -0.34**



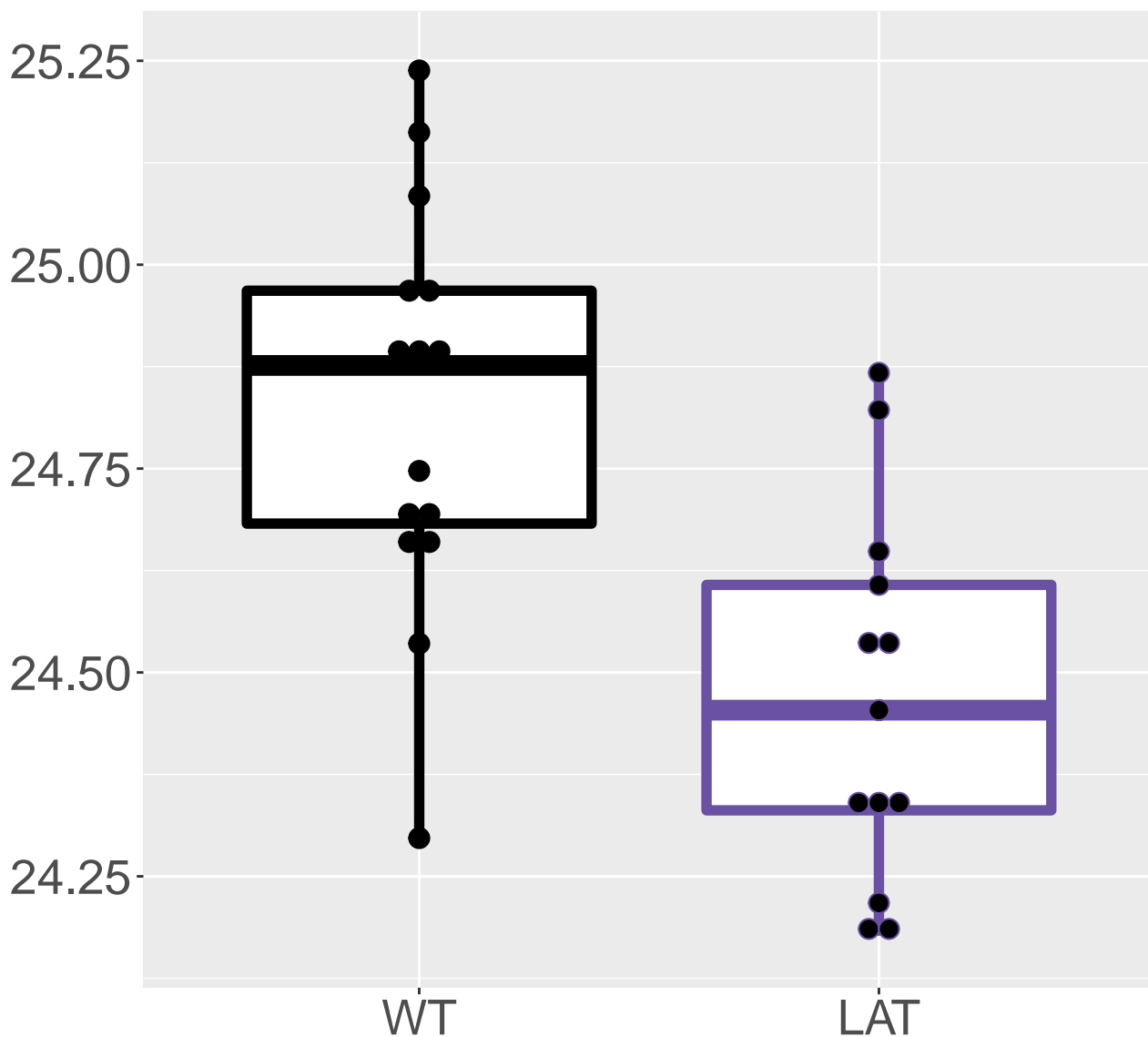
**M587.1796T364.34**

**FDR = 0.0066, FC = -1**



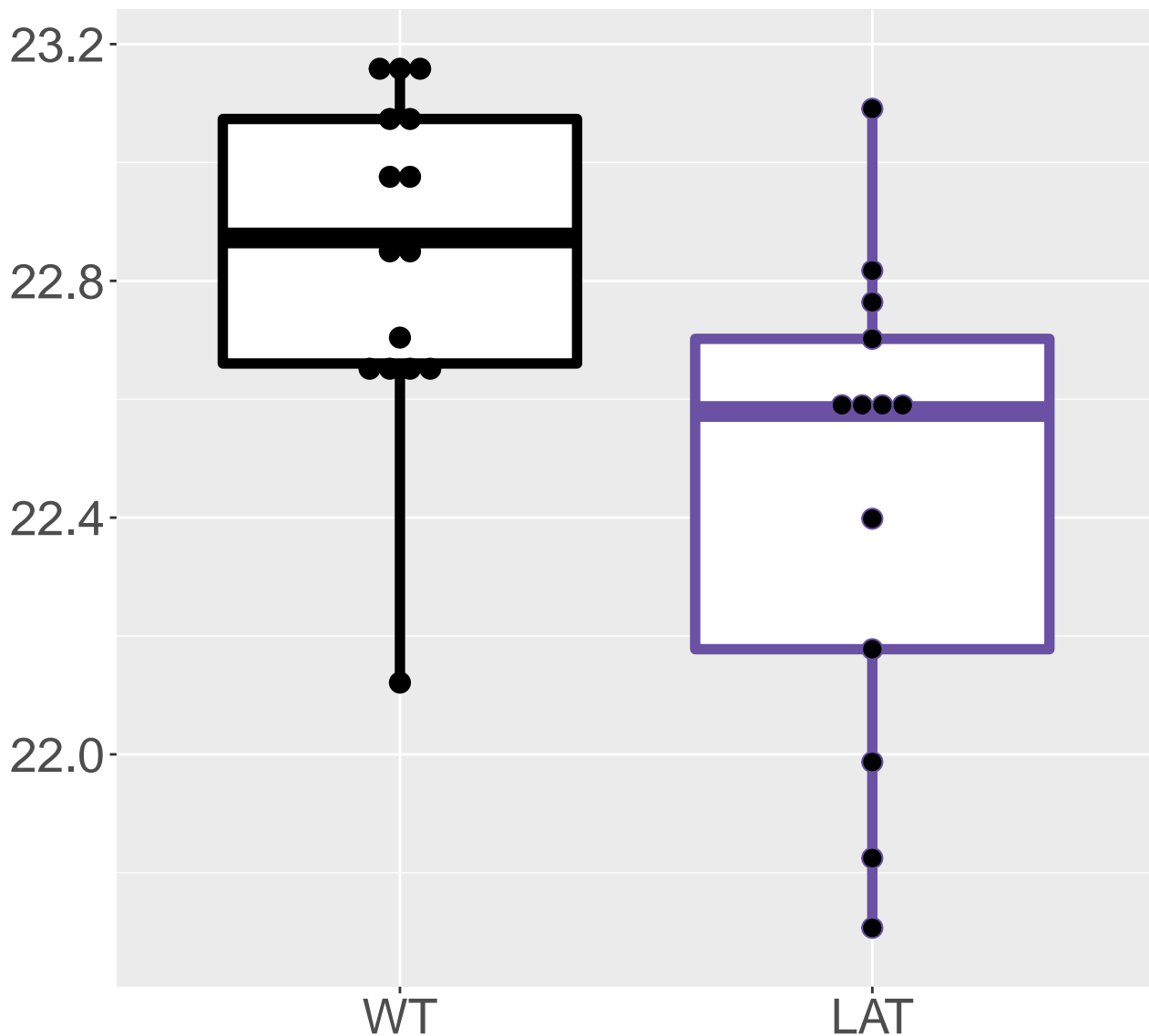
**M187.038T389.48**

**FDR = 0.0067, FC = -0.36**



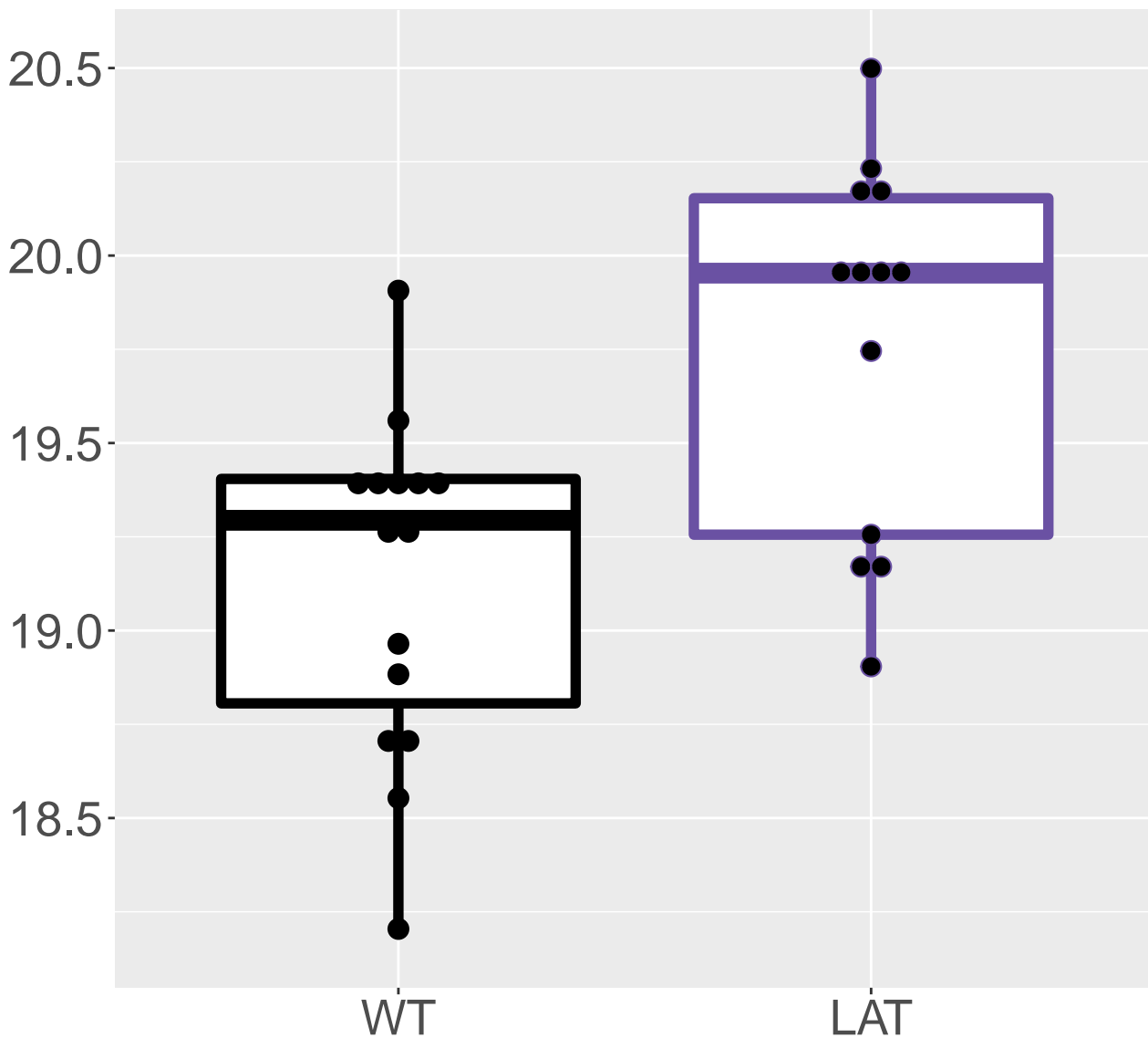
**M236.0778T495.06**

**FDR = 0.0067, FC = -0.4, sex\***

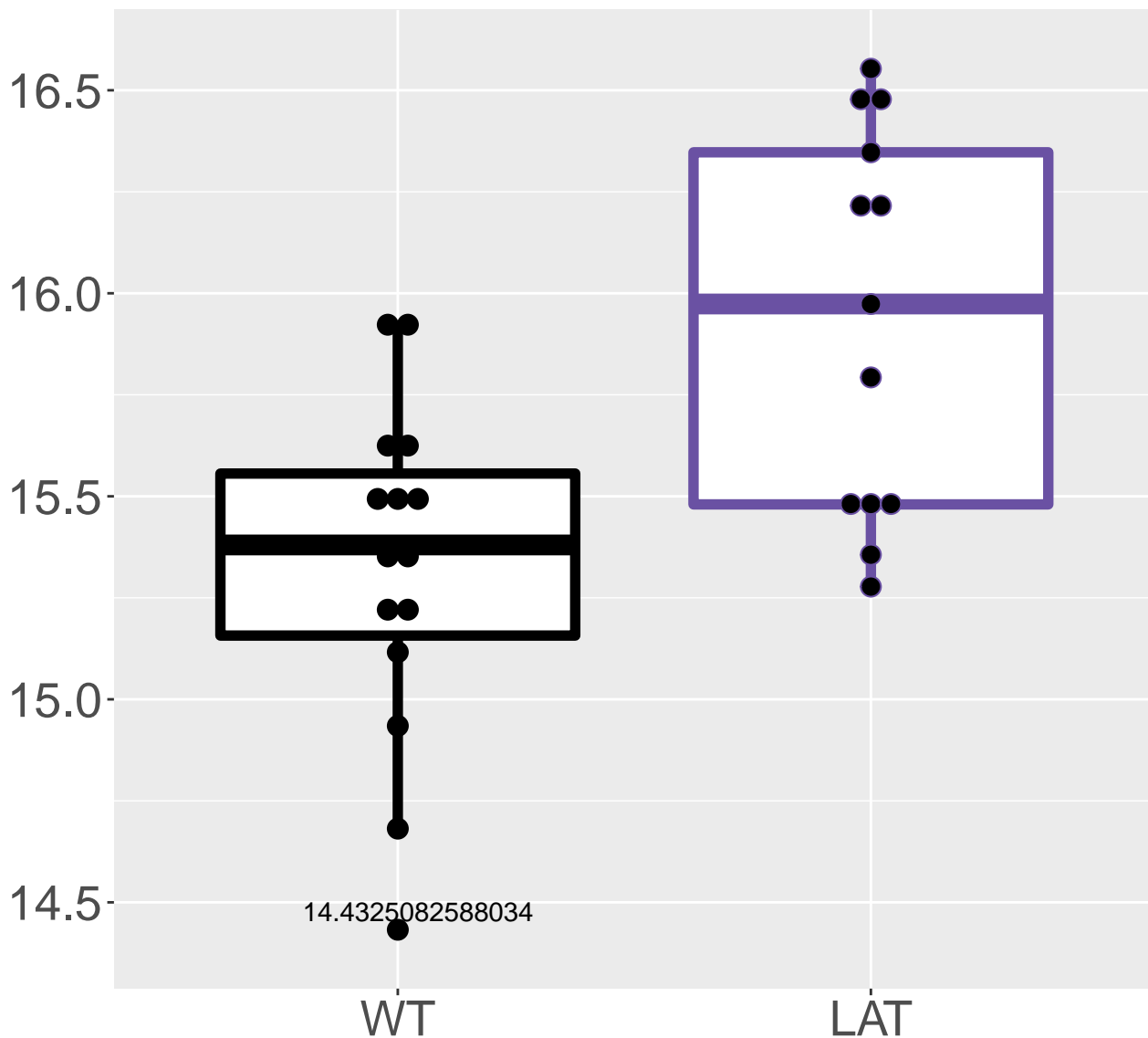




**FDR = 0.0068, FC = 0.65**

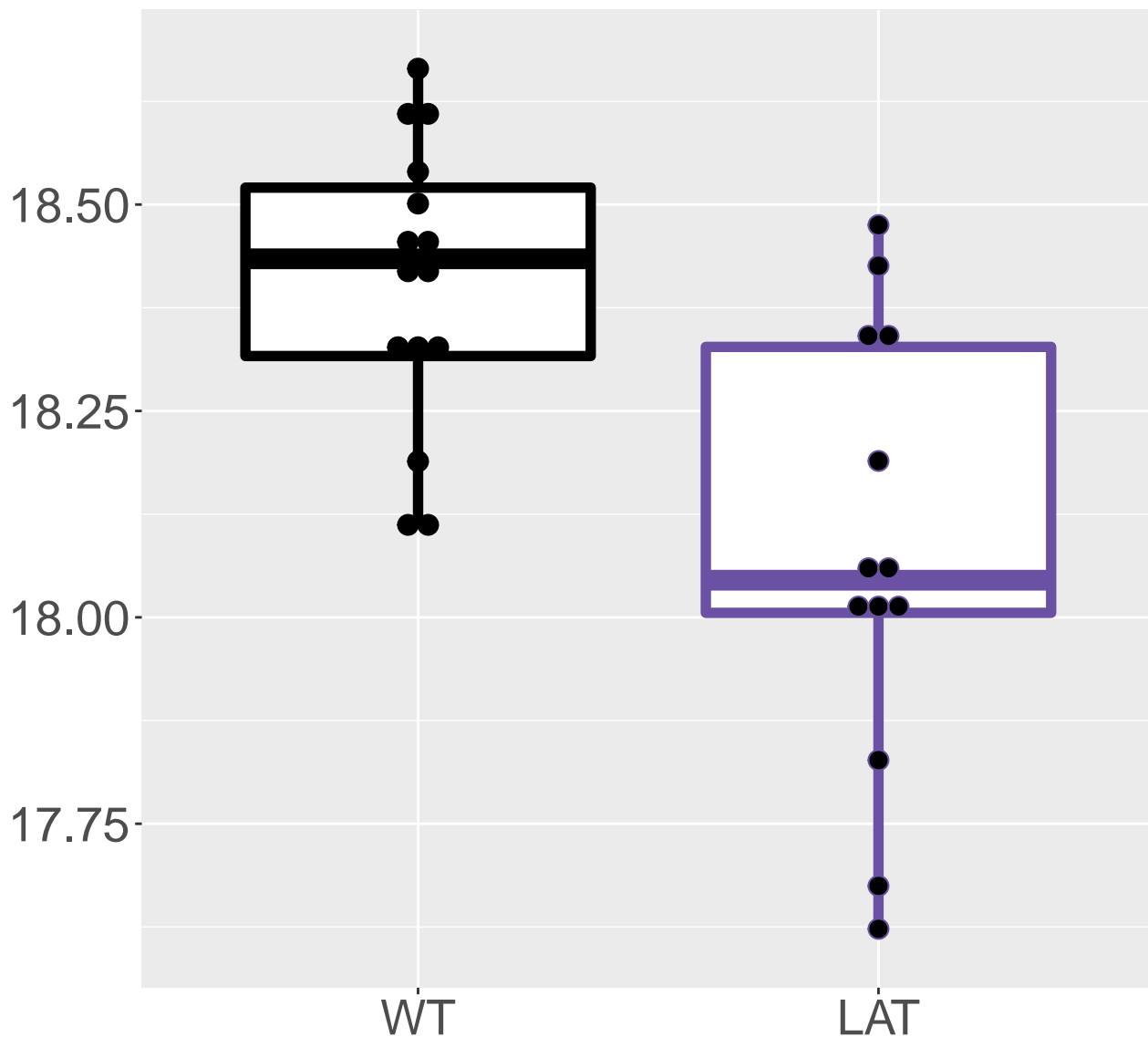


**FDR = 0.0068, FC = 0.61**



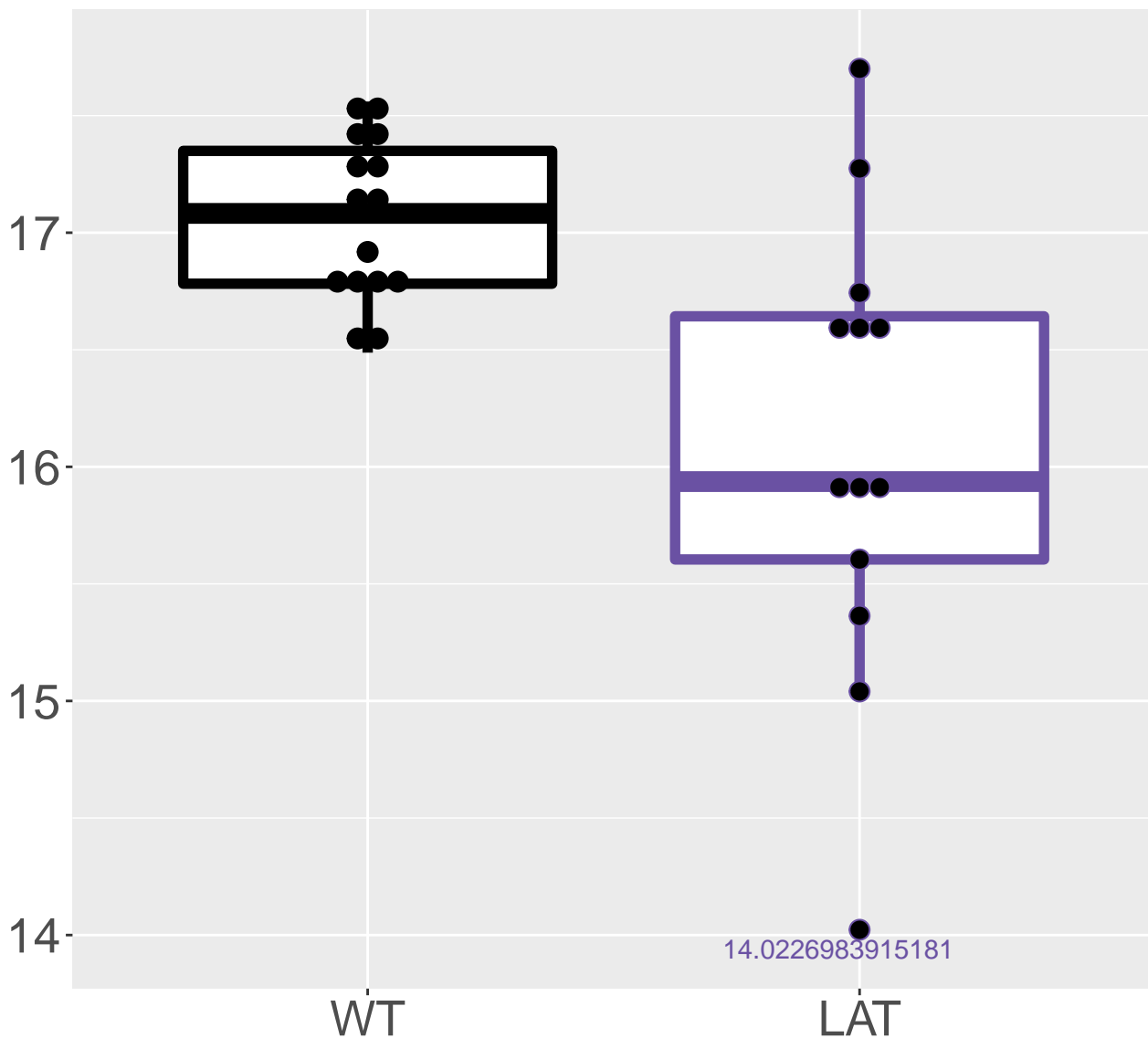
**M75.0281T492.05**

**FDR = 0.0069, FC = -0.32**



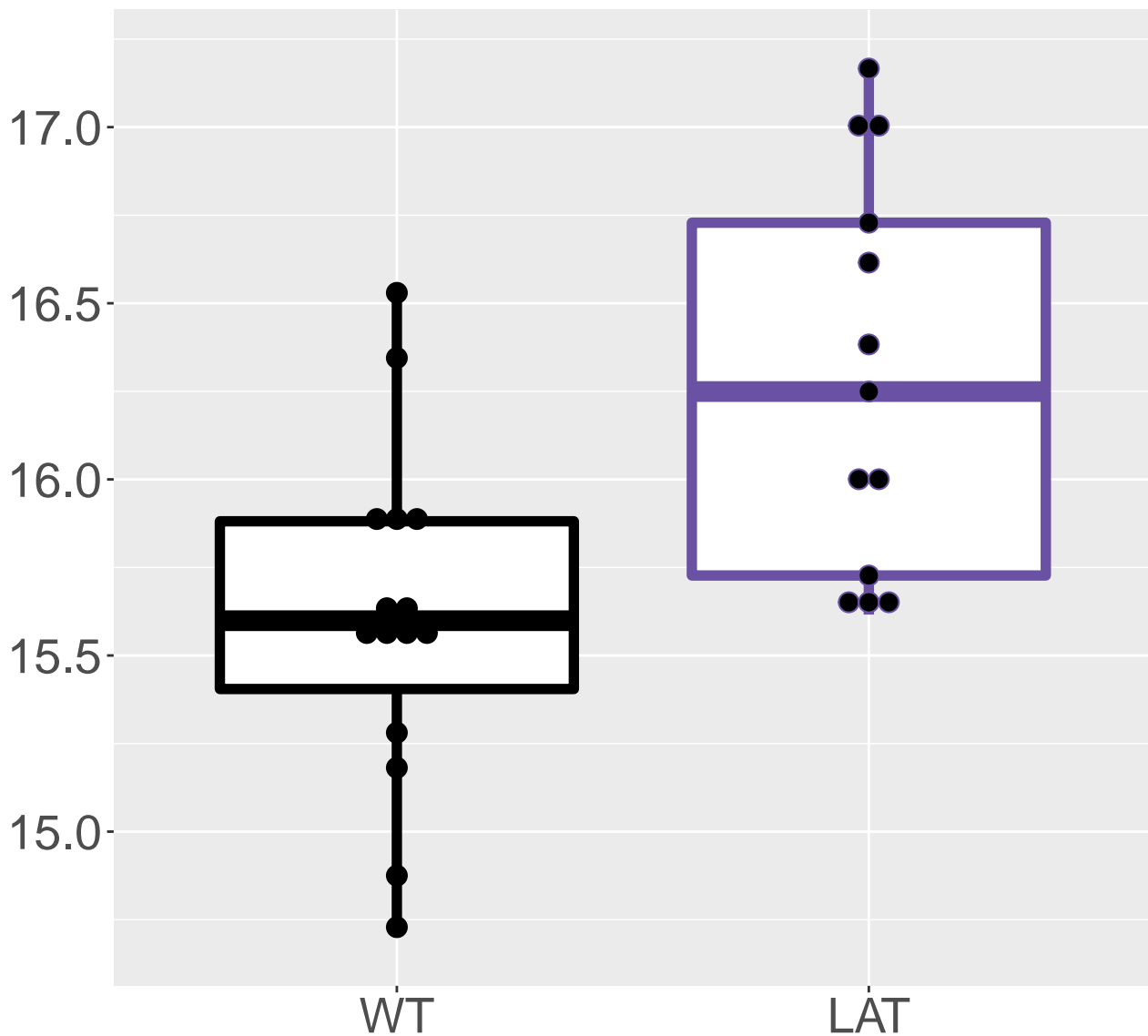
**M457.1207T544.49**

**FDR = 0.0069, FC = -0.96**



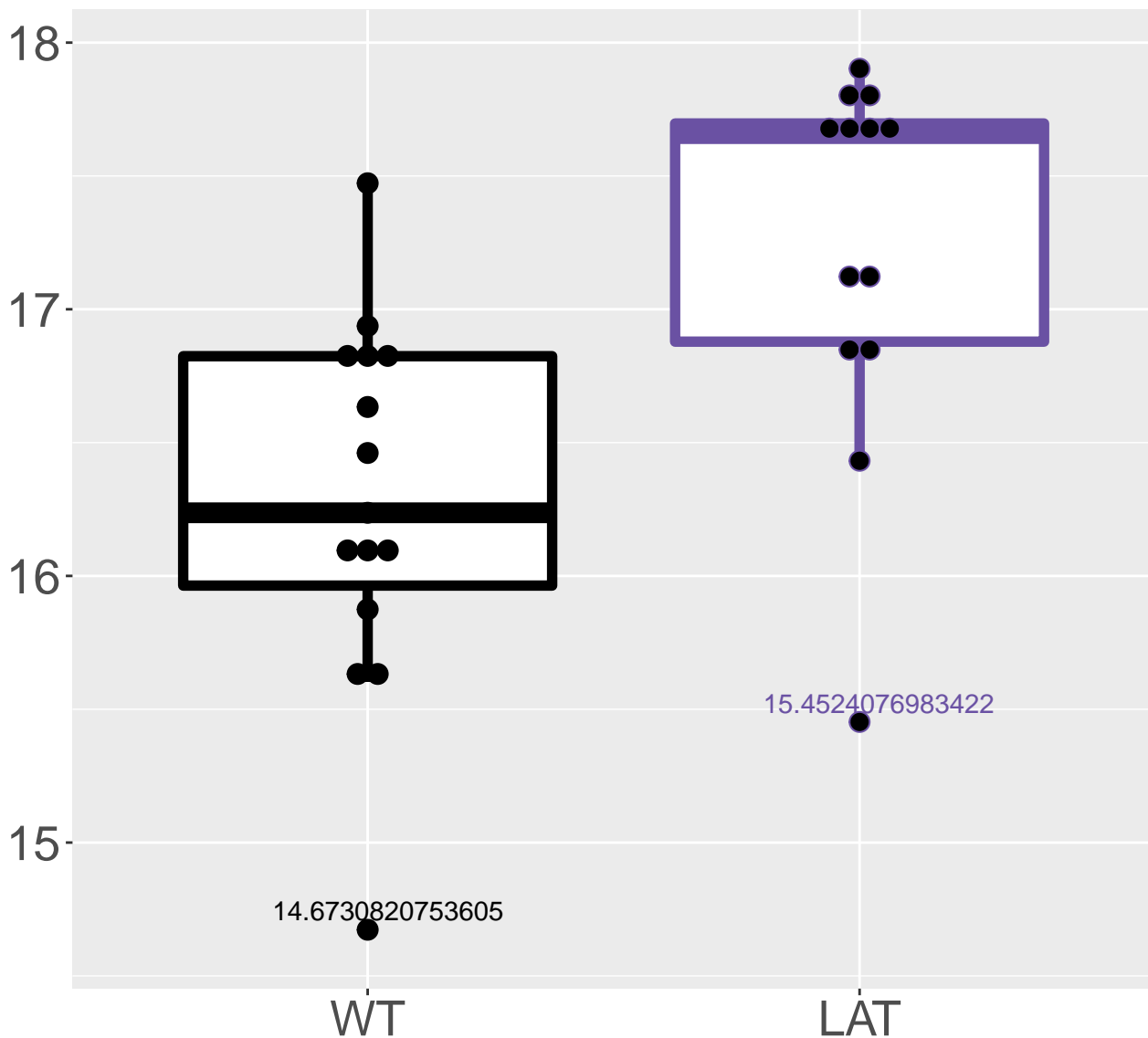
**M287.1002T570.39**

**FDR = 0.007, FC = 0.69**



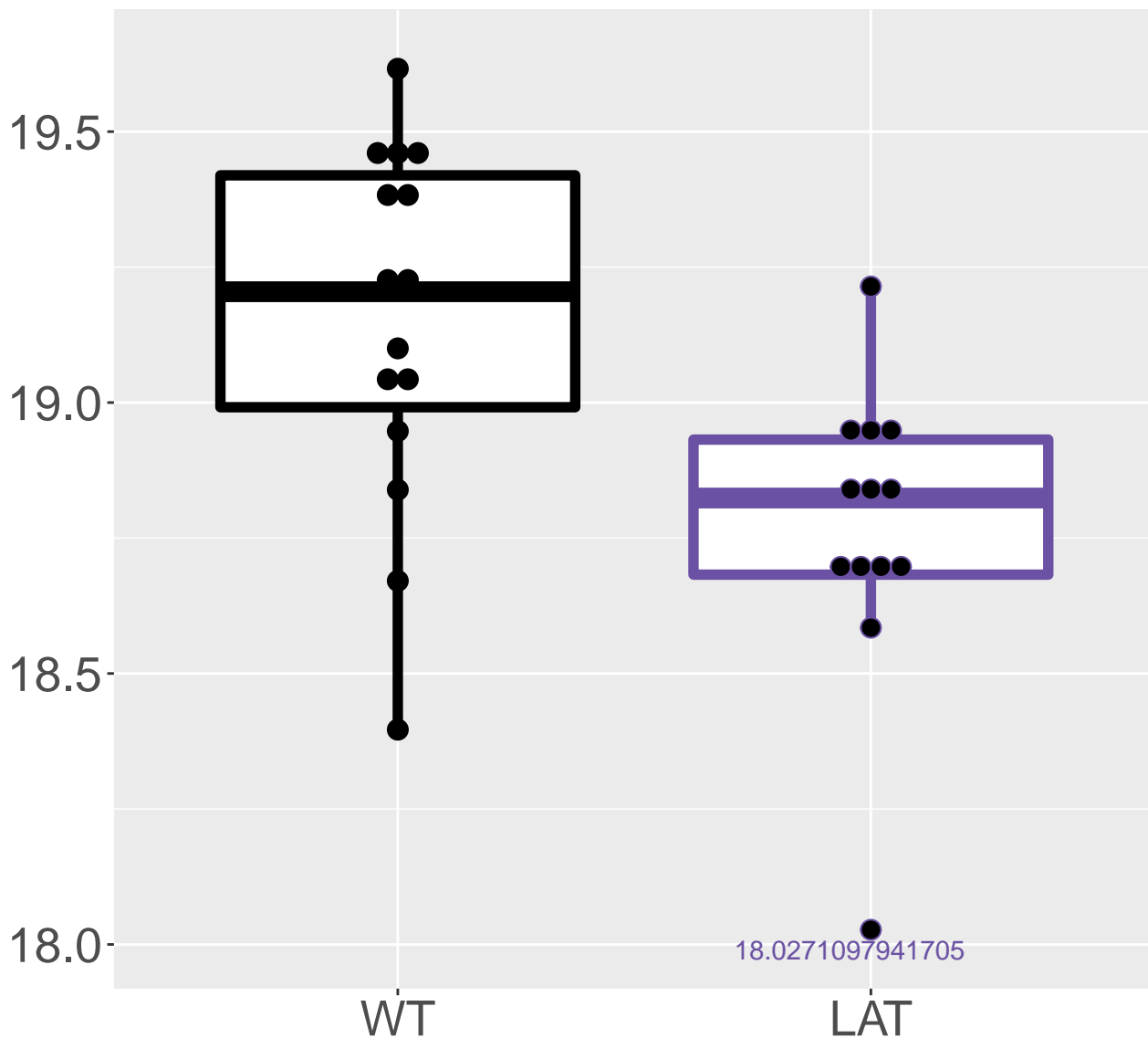
**M660.1299T598.33**

**FDR = 0.0071, FC = 0.95**

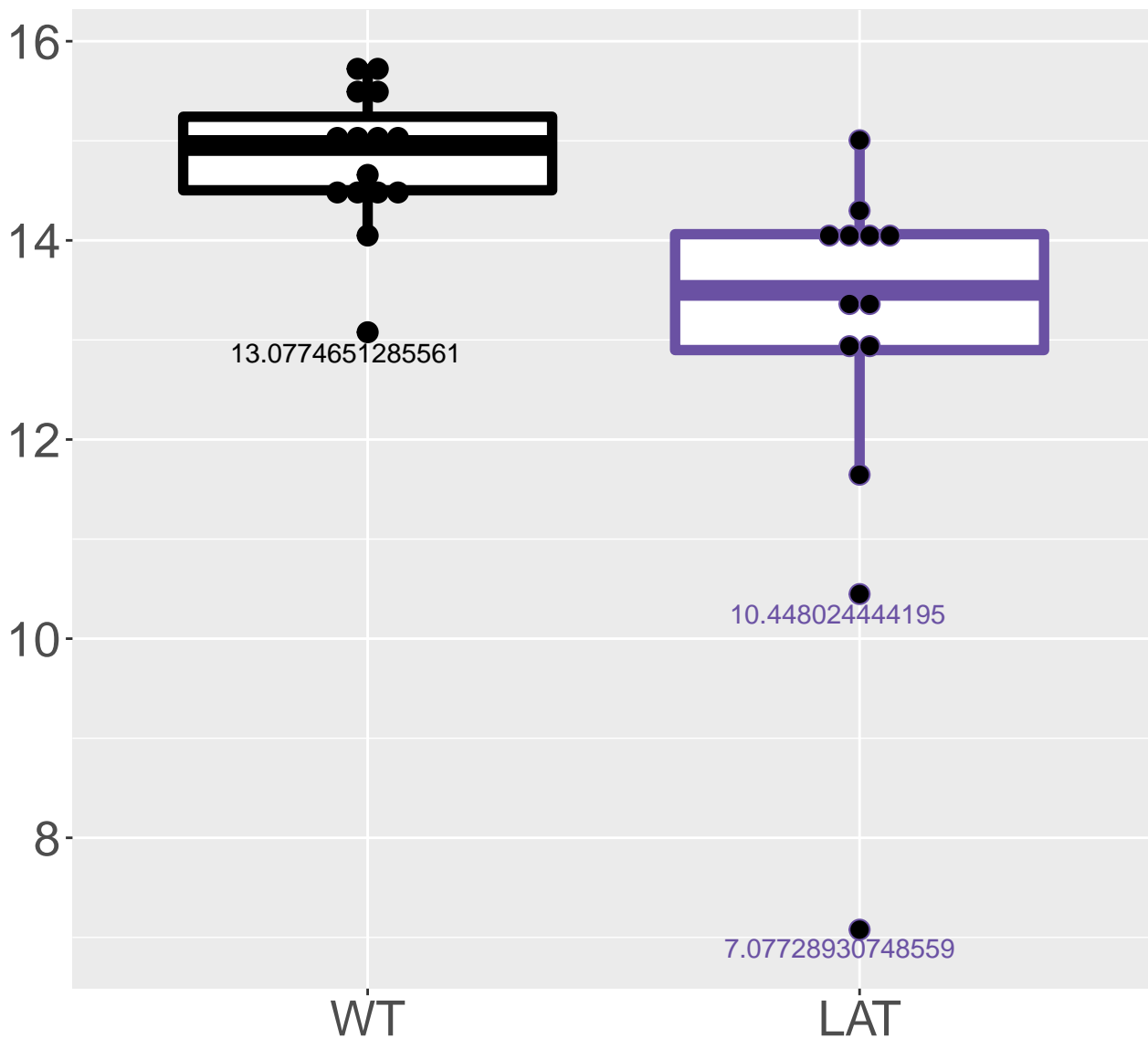


**M251.2017T79.04**

**FDR = 0.0072, FC = -0.38**



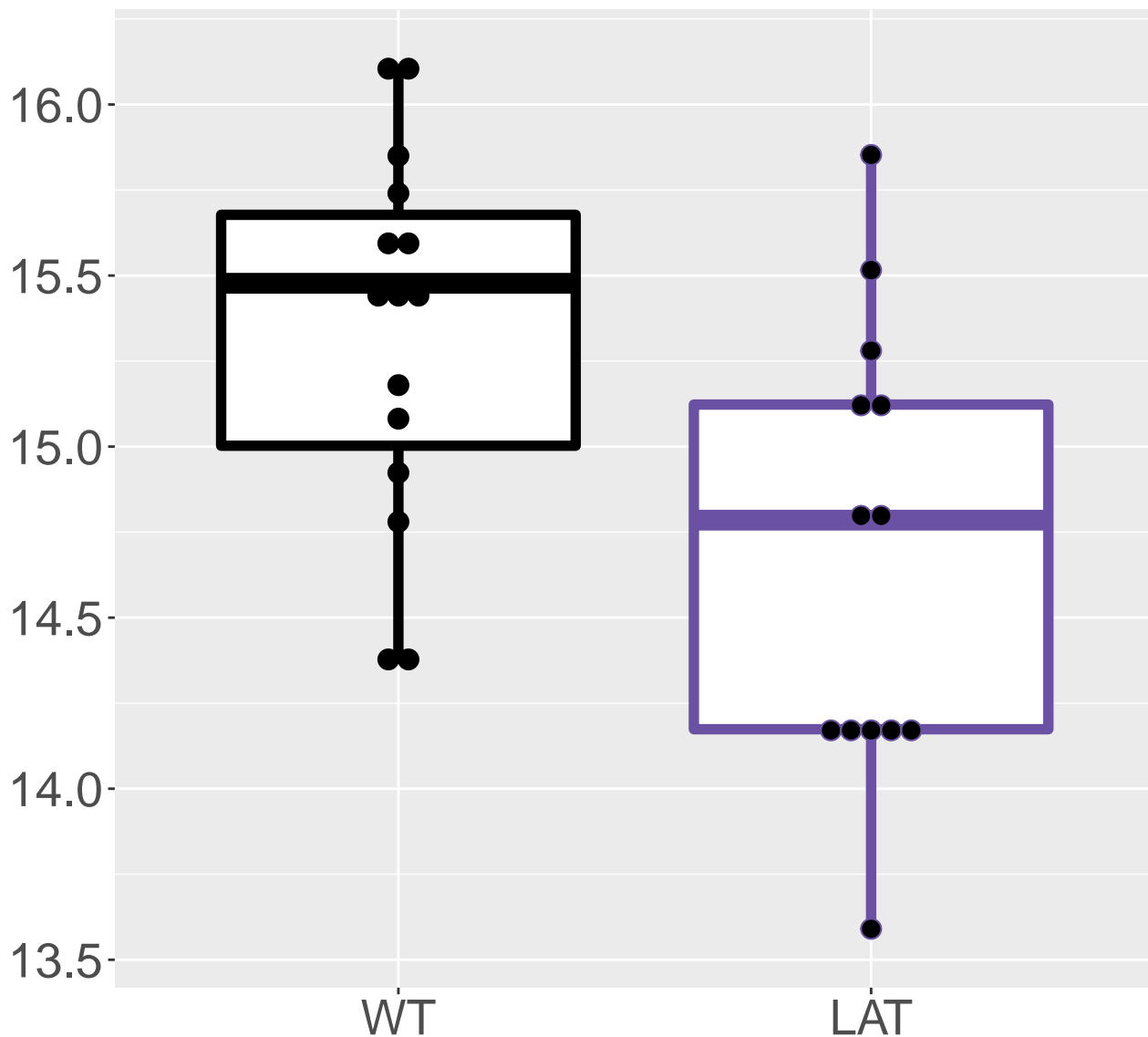
**M359.1102T155.14**  
**FDR = 0.0073, FC = -2**



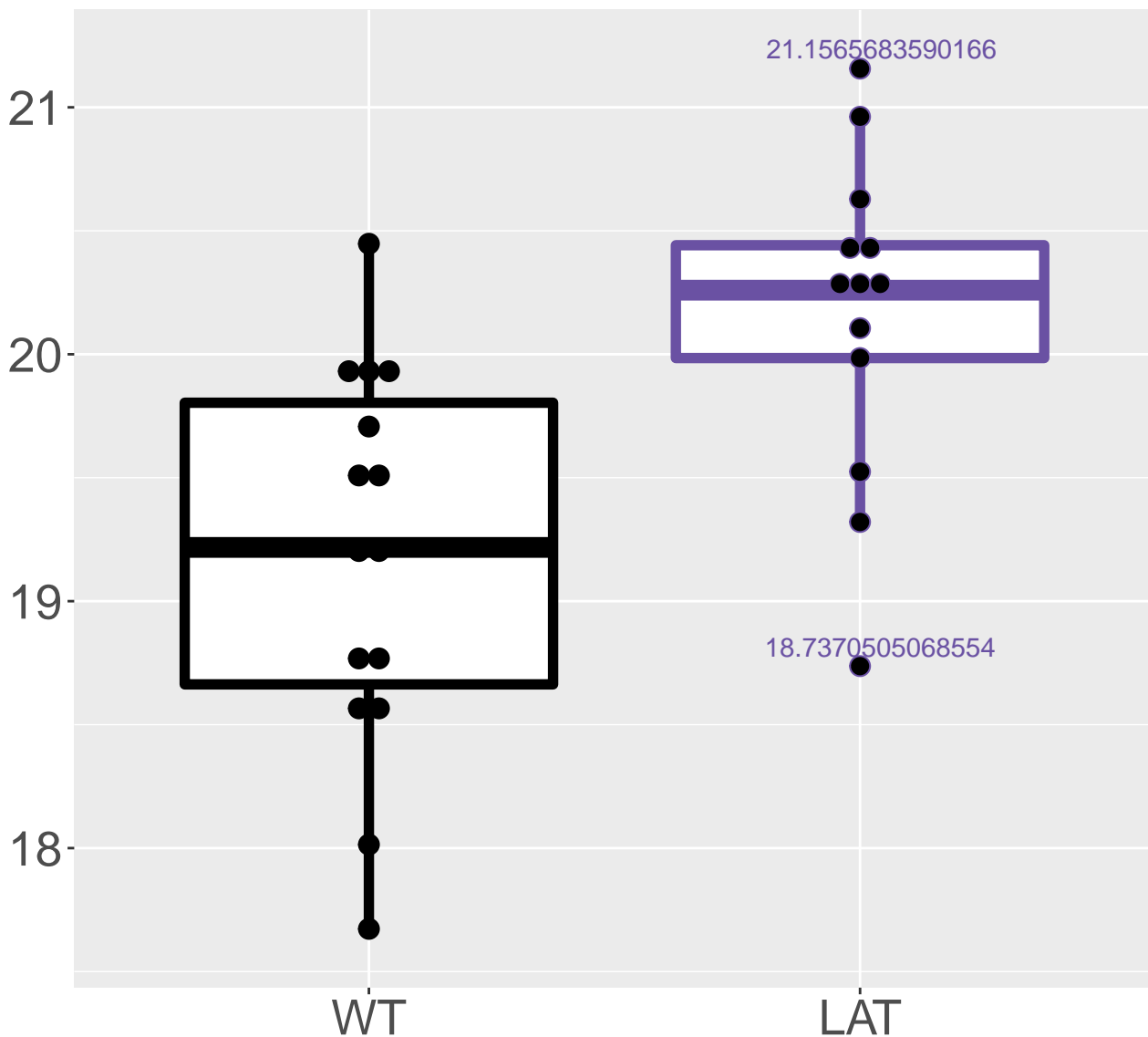


**M644.1816T567.48**

**FDR = 0.0073, FC = -0.65, sex\*\***

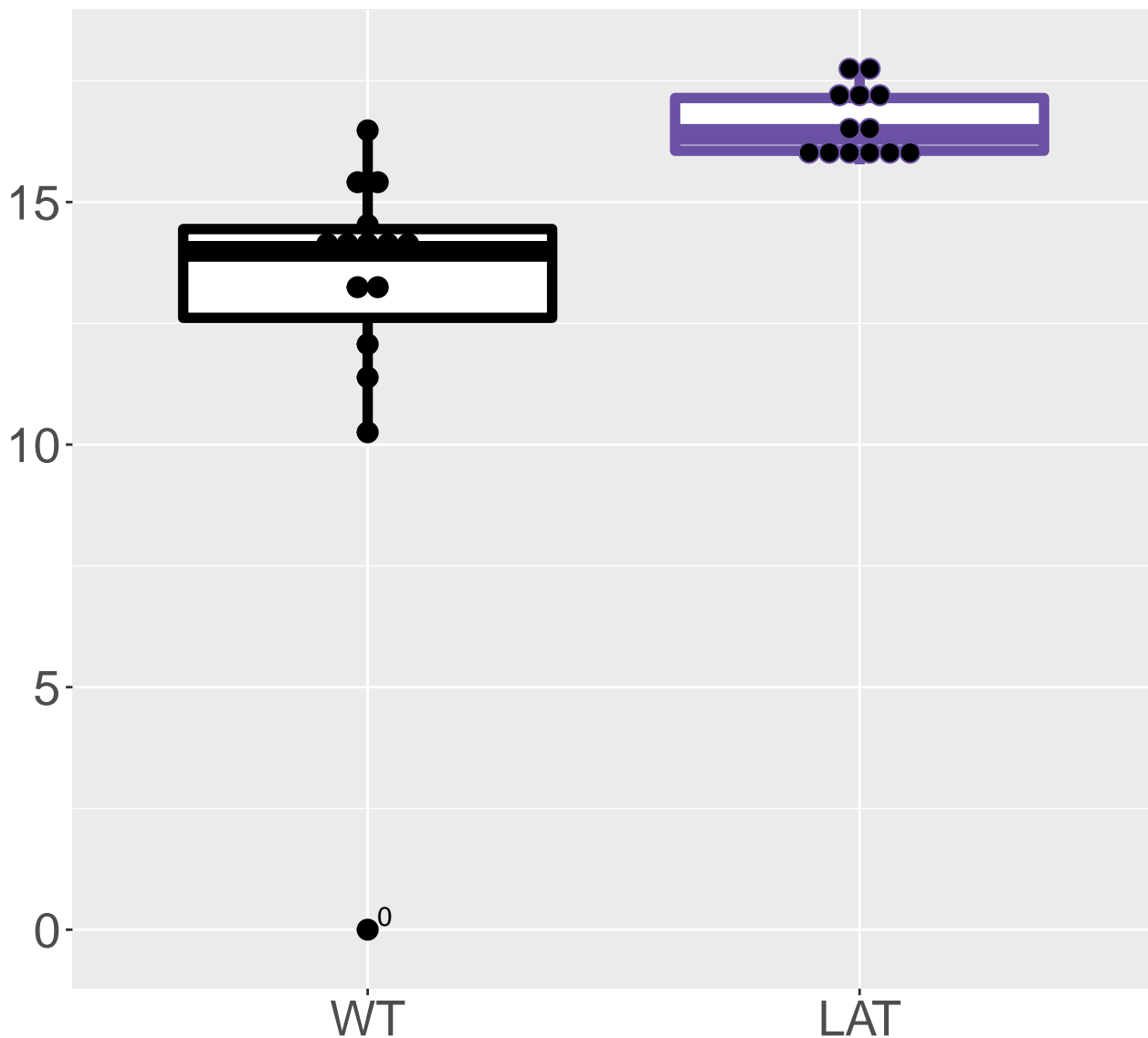


**M267.039T589.65\_2**  
**FDR = 0.0073, FC = 0.98**



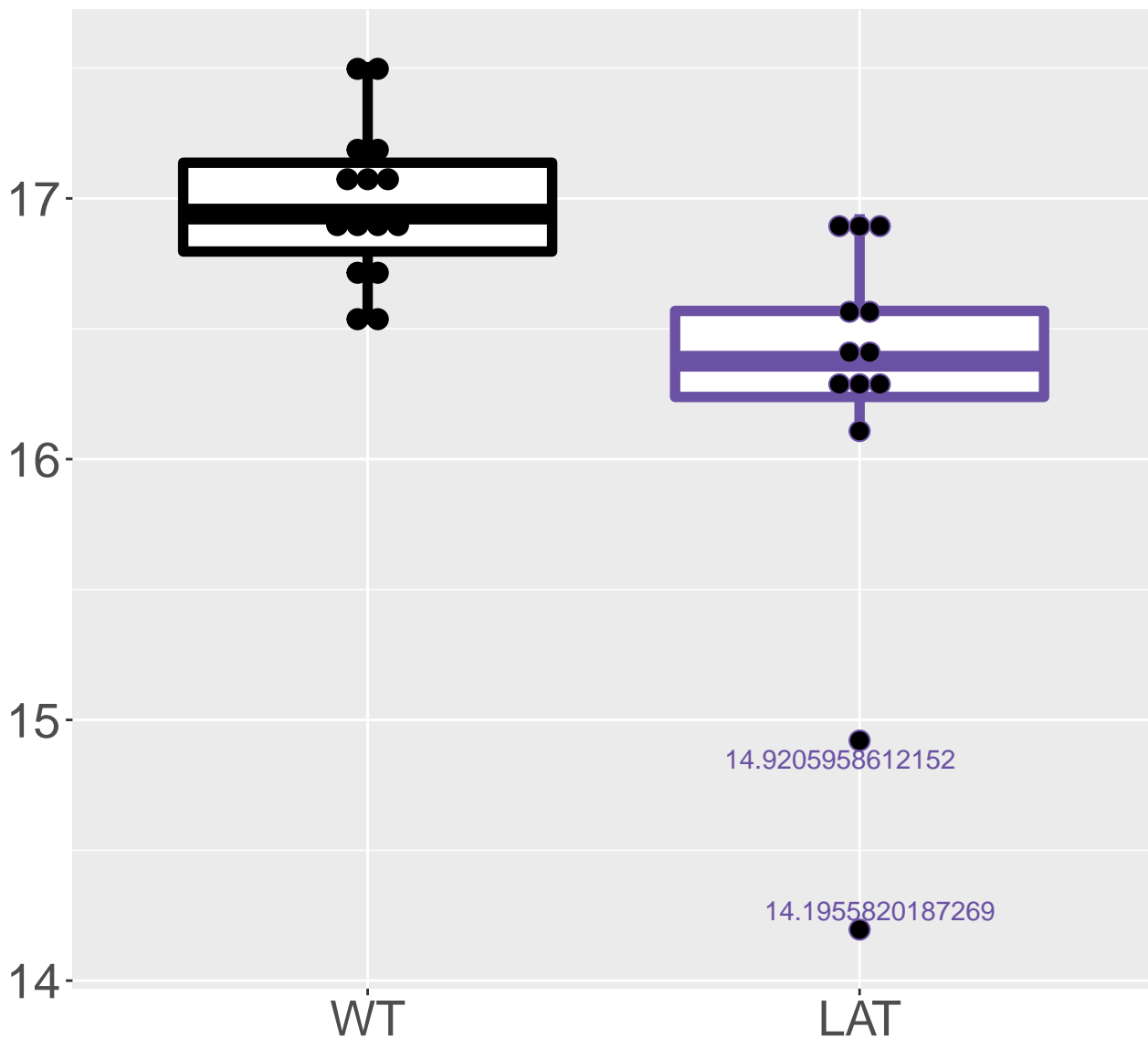
**M308.5399T539.62**

**FDR = 0.0074, FC = 3.8**

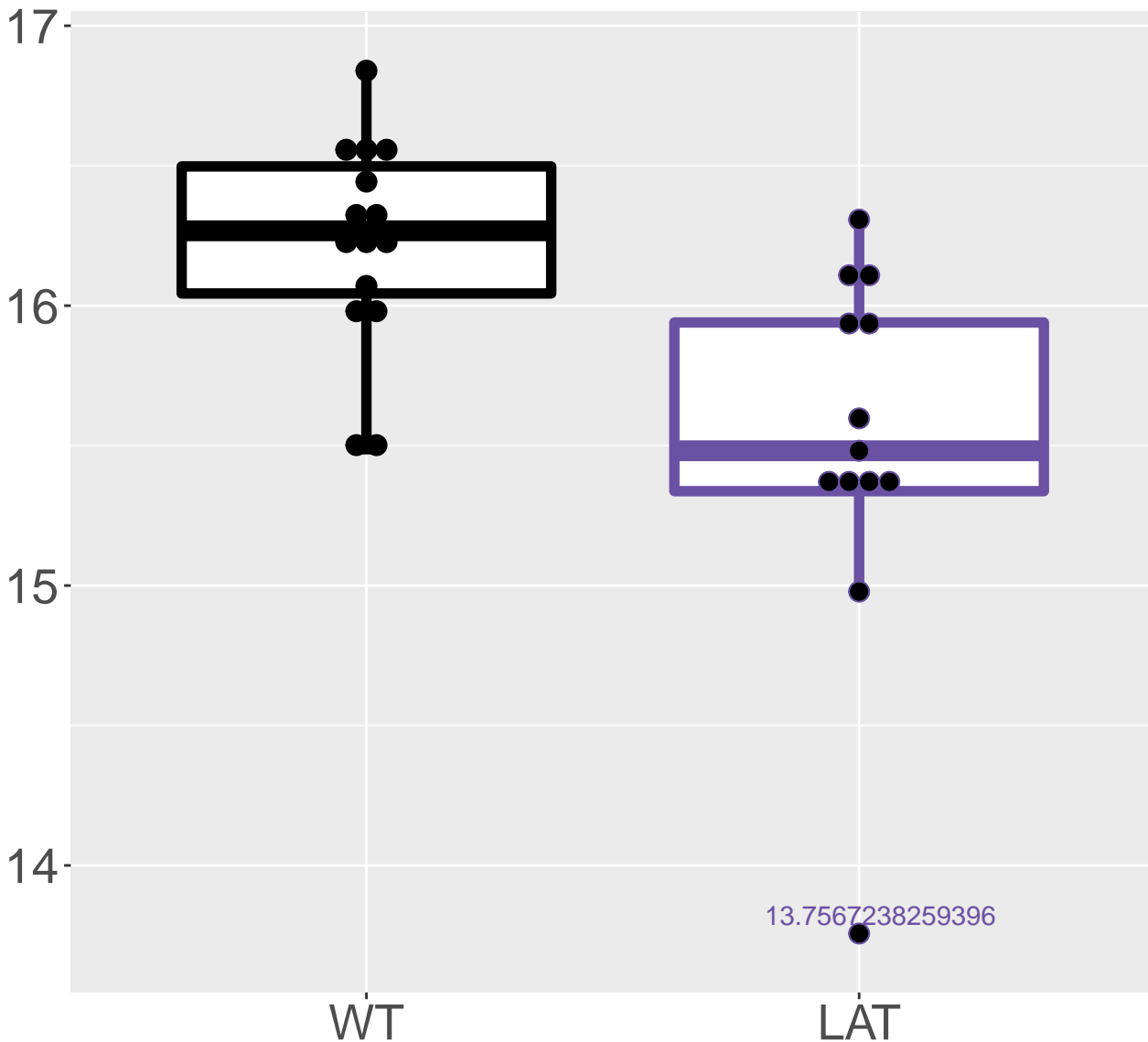


**M171.1139T189.16**

**FDR = 0.0075, FC = -0.78**

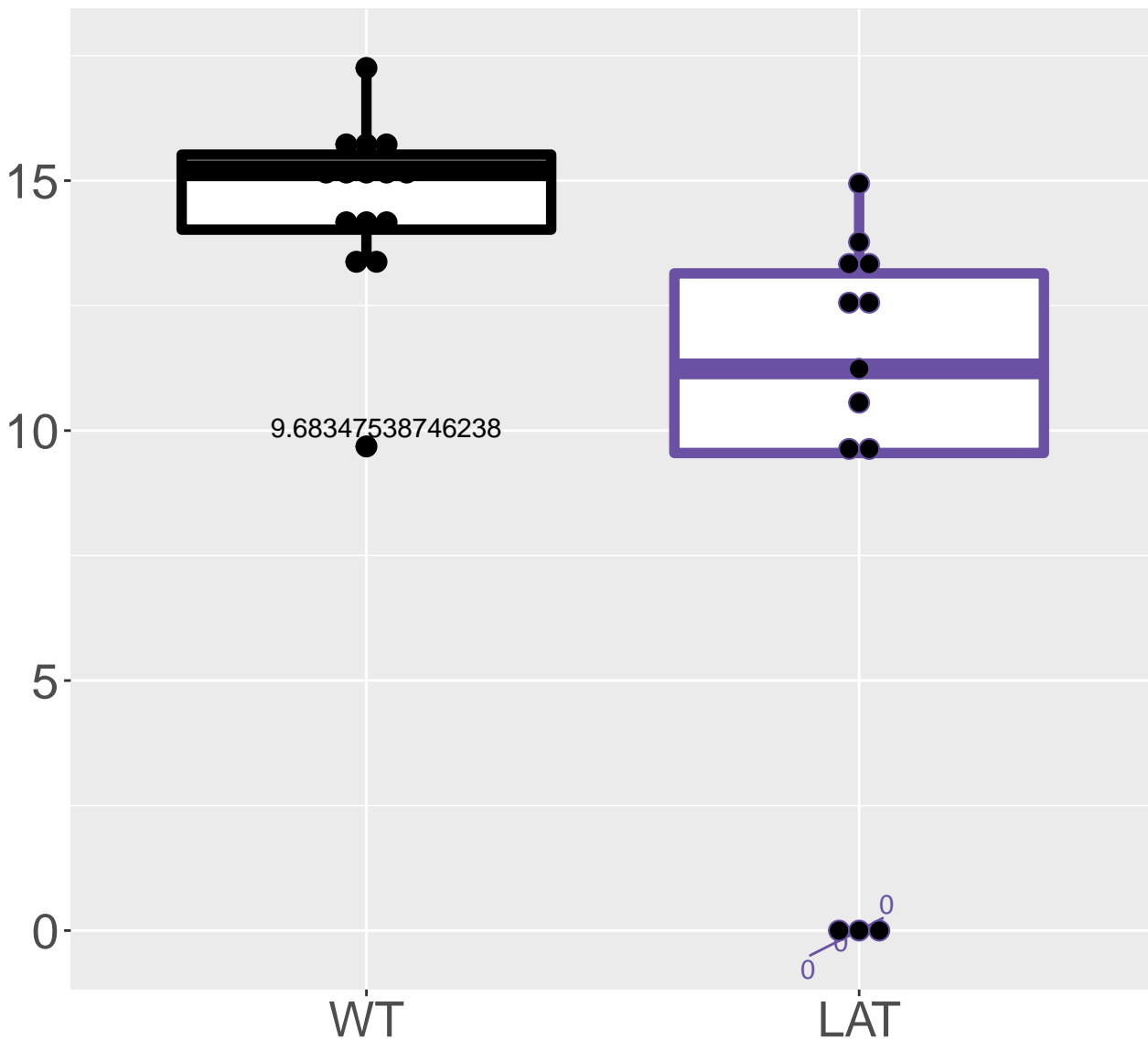


**M310.1151T322.81**  
**FDR = 0.0075, FC = -0.71**

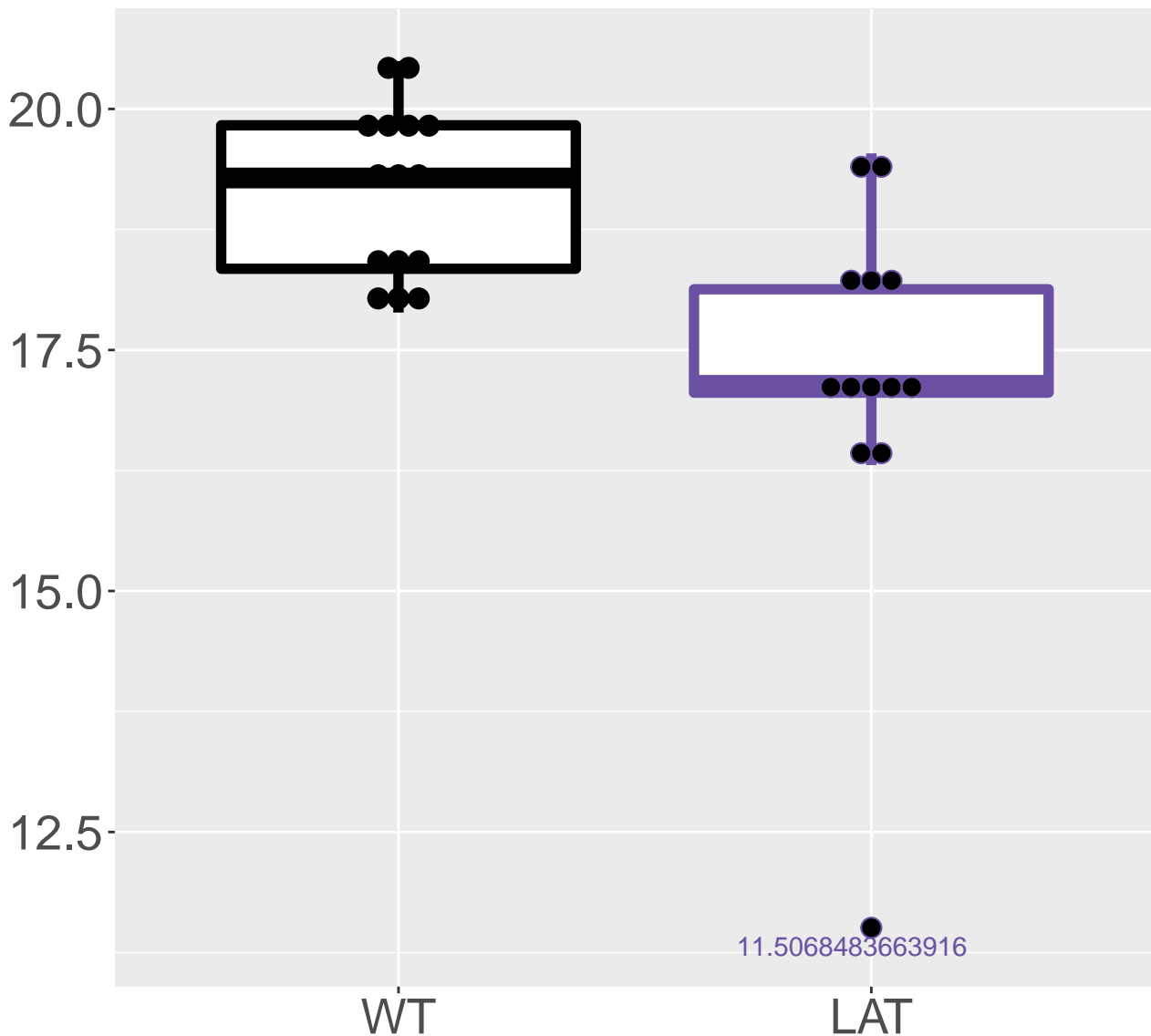


**M342.0868T294.92**

**FDR = 0.0075, FC = -5.3**

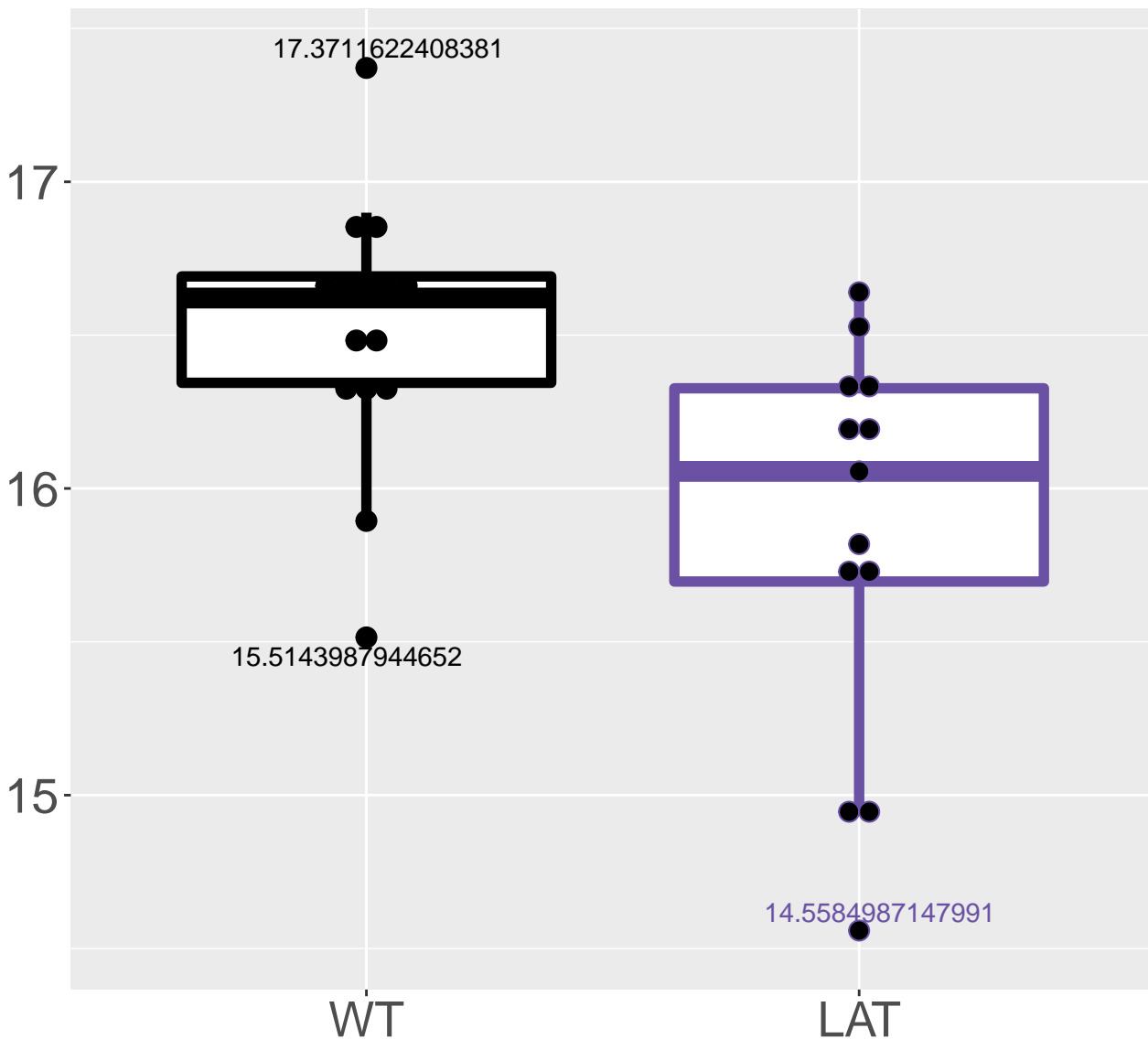


**M438.2182T203.08**  
**FDR = 0.0075, FC = -2**



**M367.107T174.06**

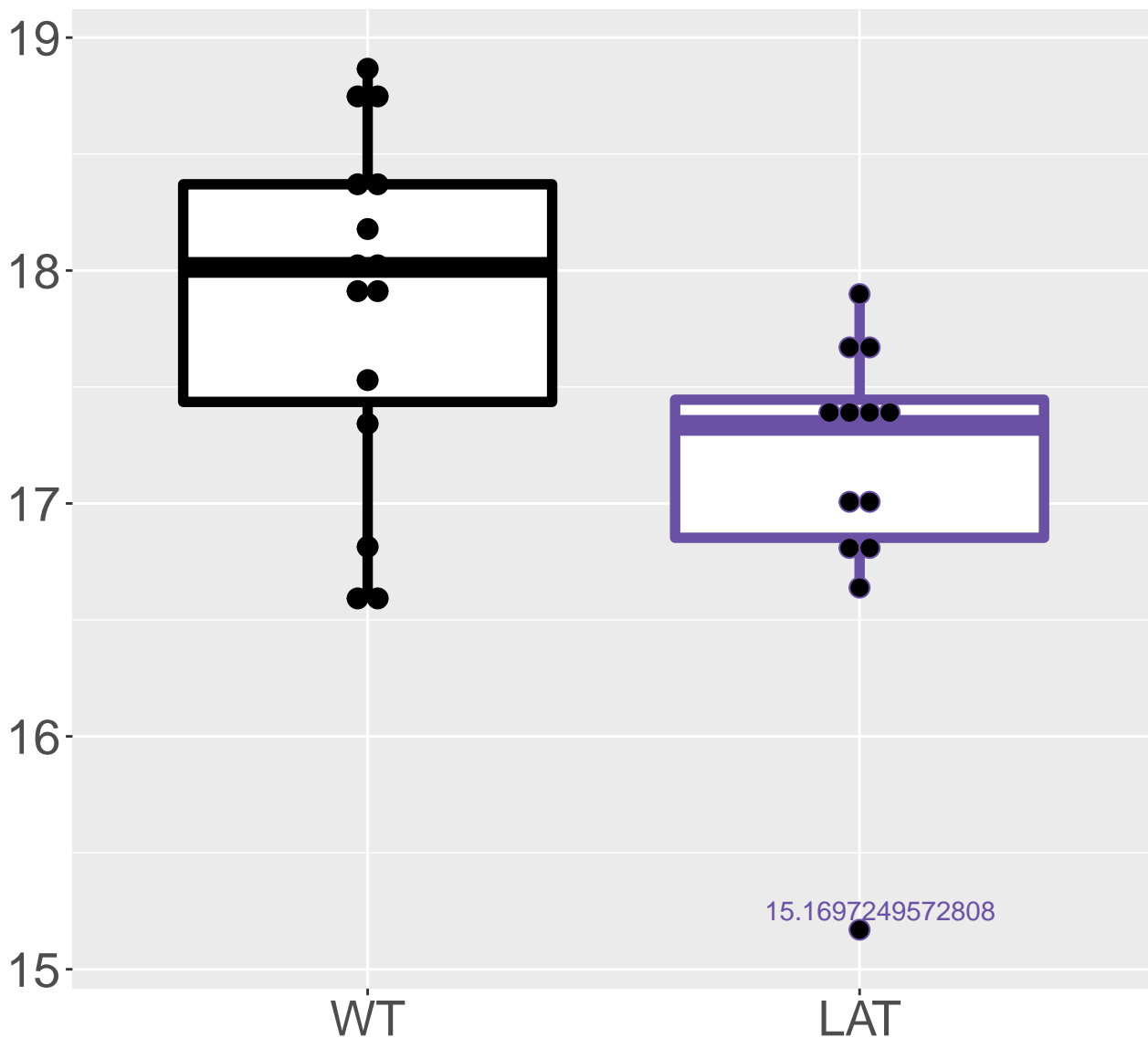
**FDR = 0.0075, FC = -0.67, sex\***





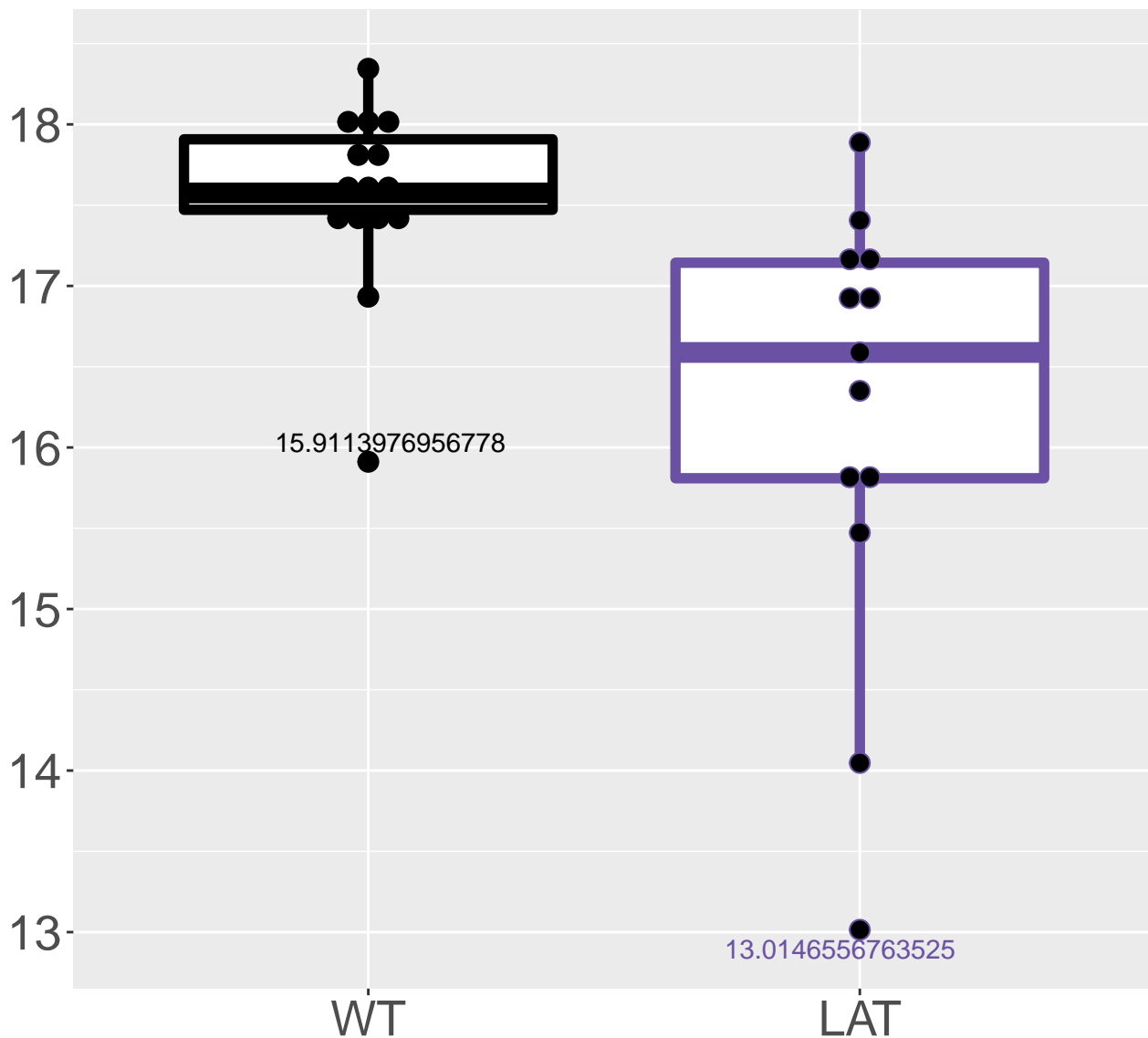
**M534.4613T78.55**

**FDR = 0.0077, FC = -0.78, sex\***



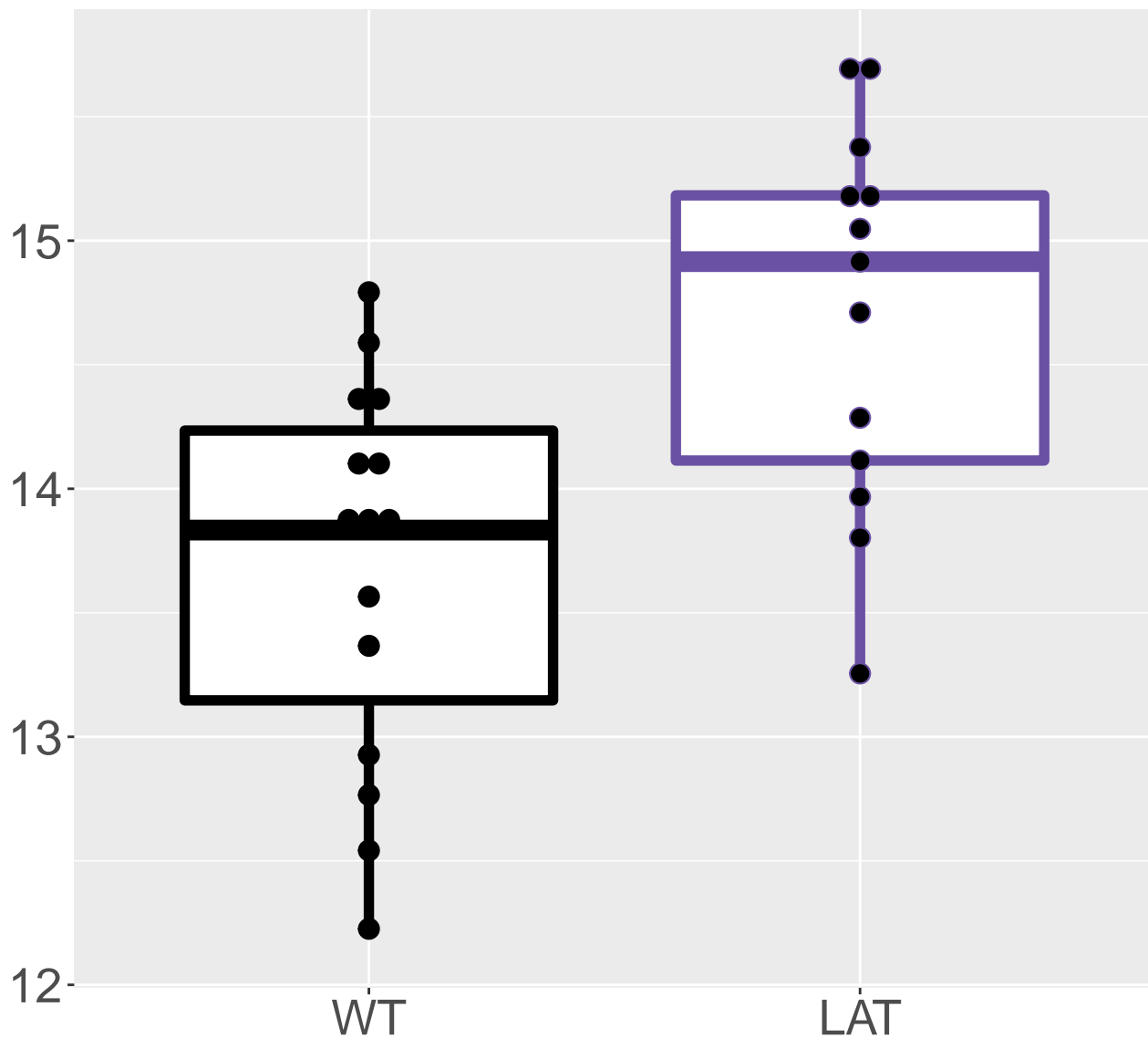
**M379.1726T185.52**

**FDR = 0.008, FC = -1.4**



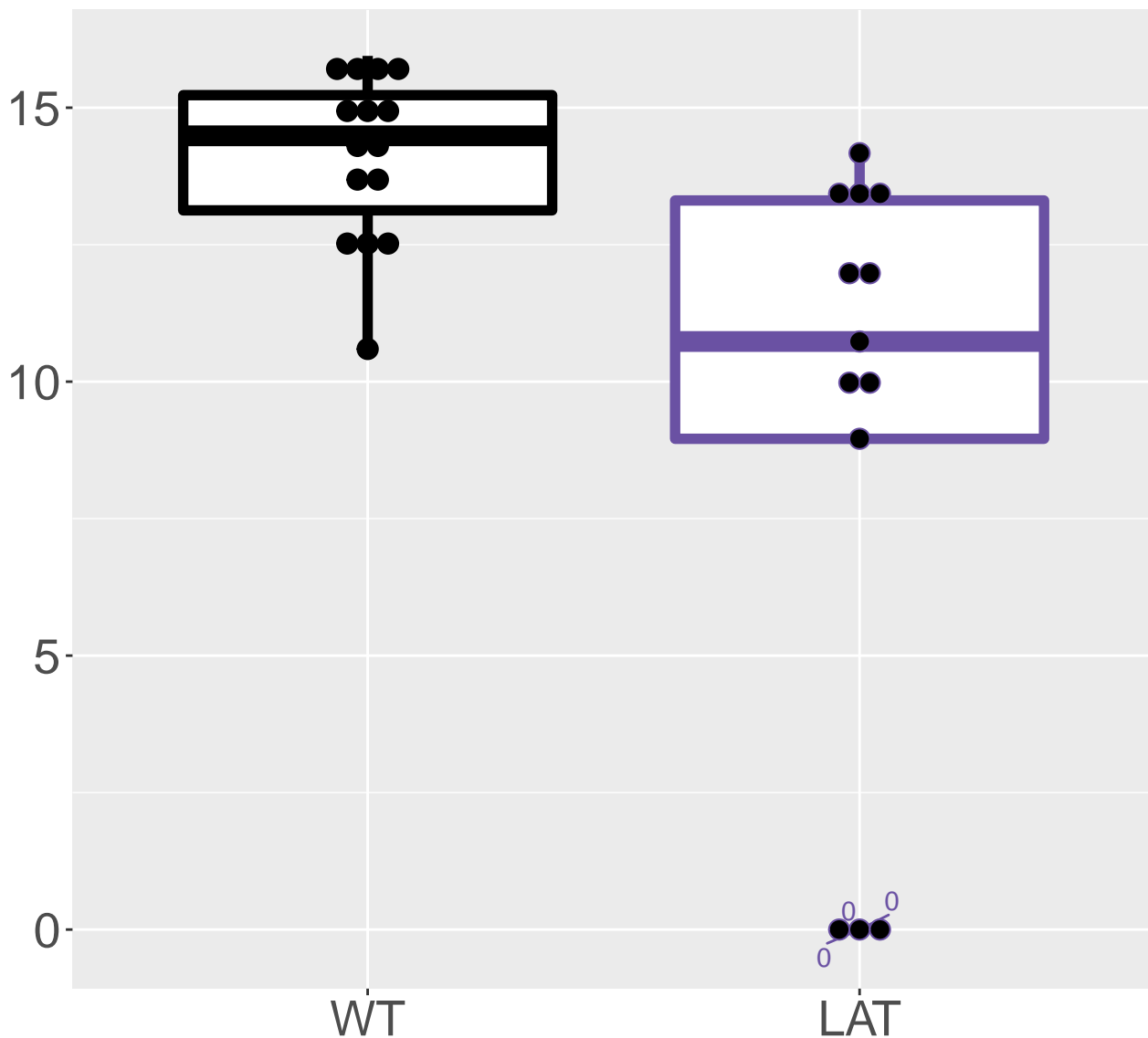
**M795.2179T518.2**

**FDR = 0.008, FC = 1**



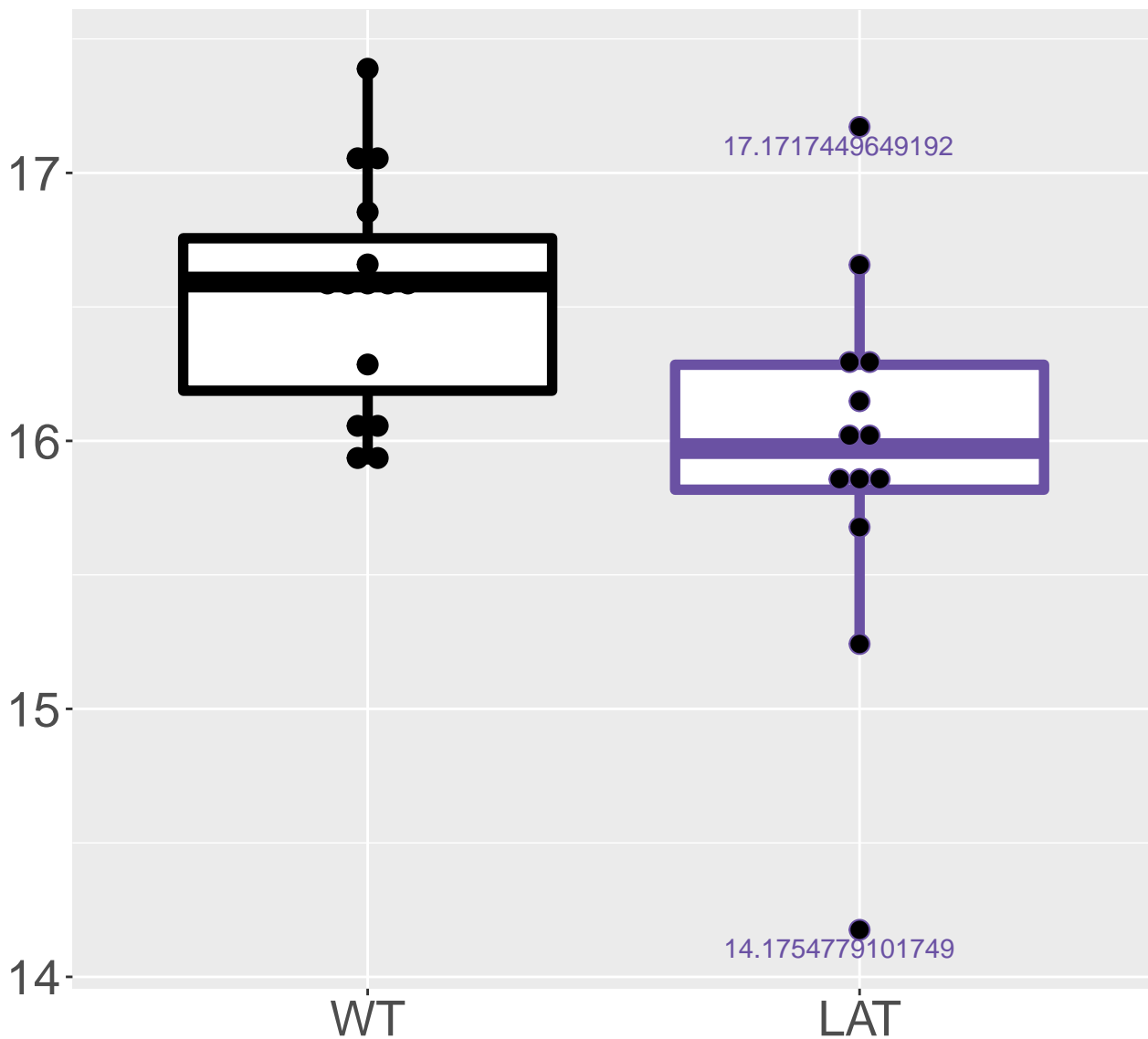
**M597.1471T539.81**

**FDR = 0.008, FC = -5**



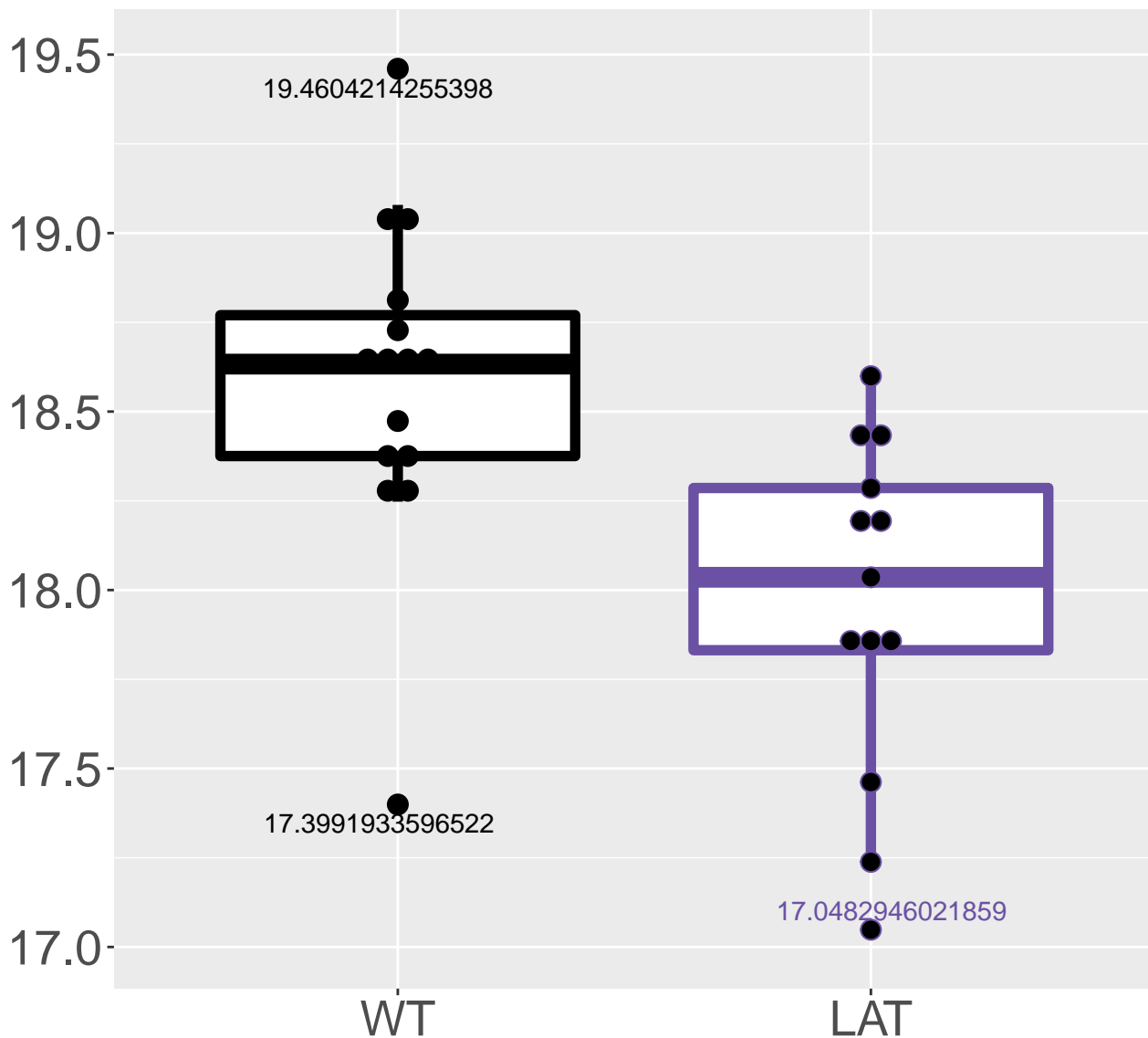
**M135.5408T522.88**

**FDR = 0.0084, FC = -0.61, sex\***



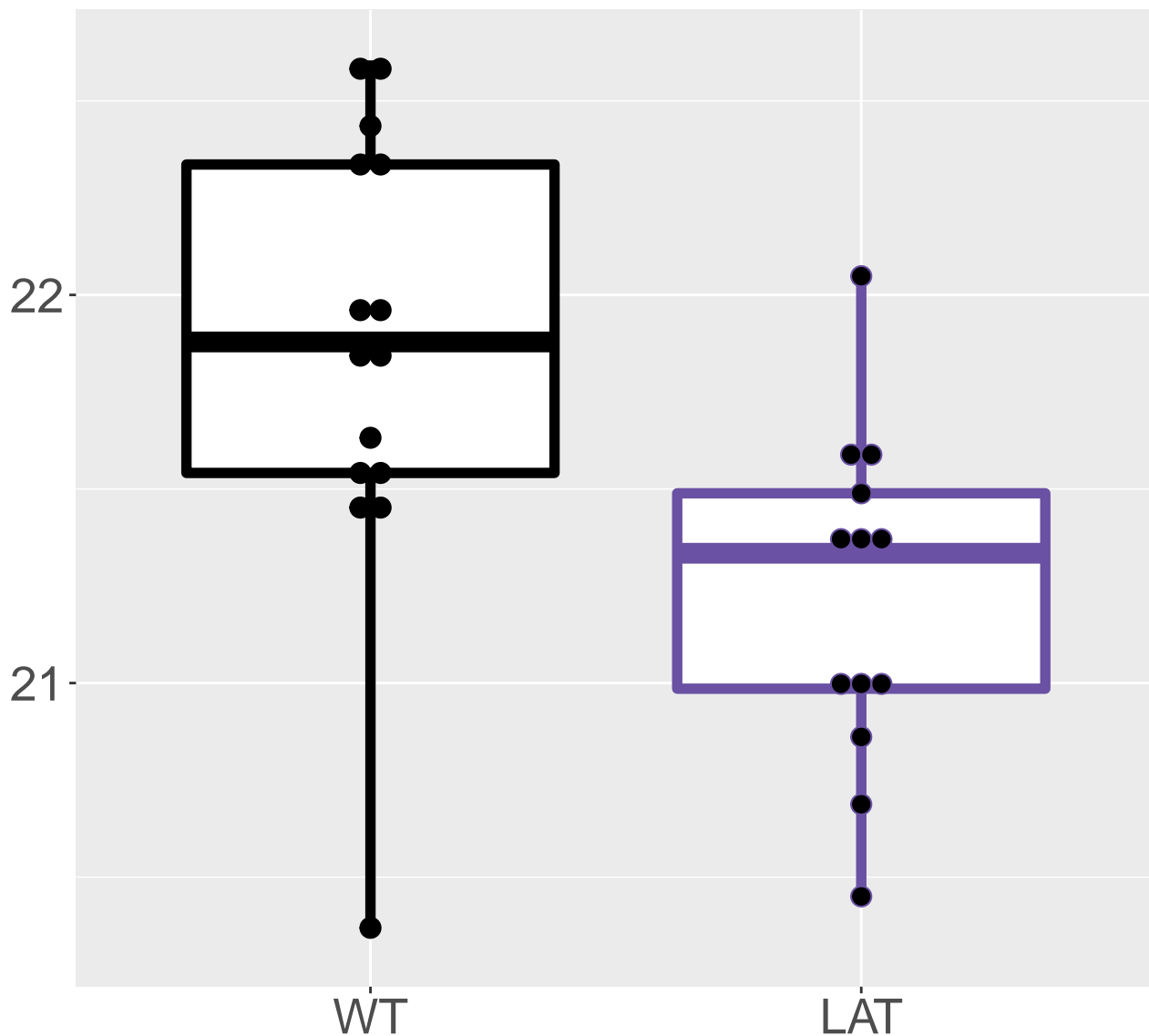
**M279.1282T334.55**

**FDR = 0.0084, FC = -0.63**



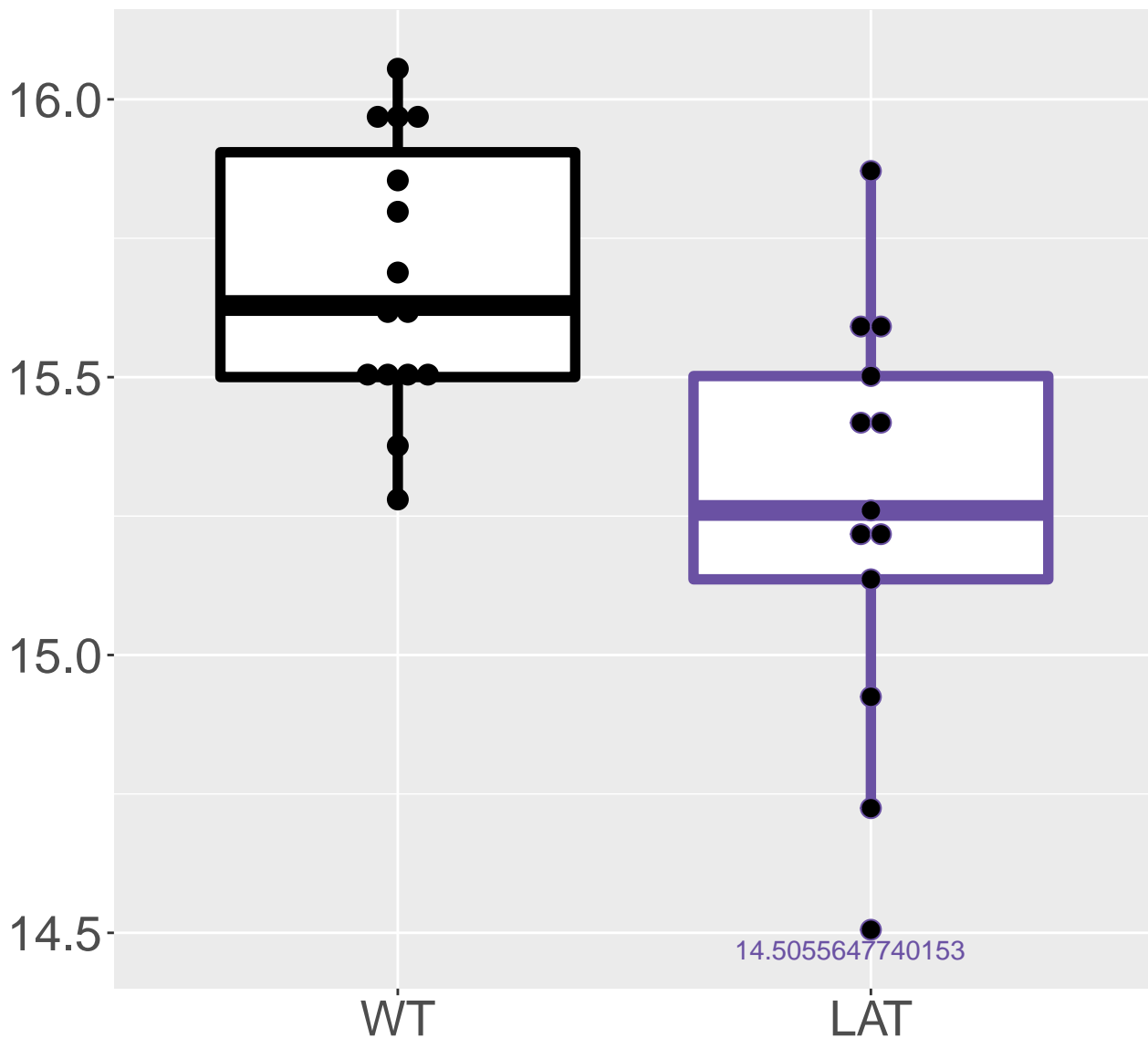
**M280.1041T469.4**

**FDR = 0.0084, FC = -0.64**



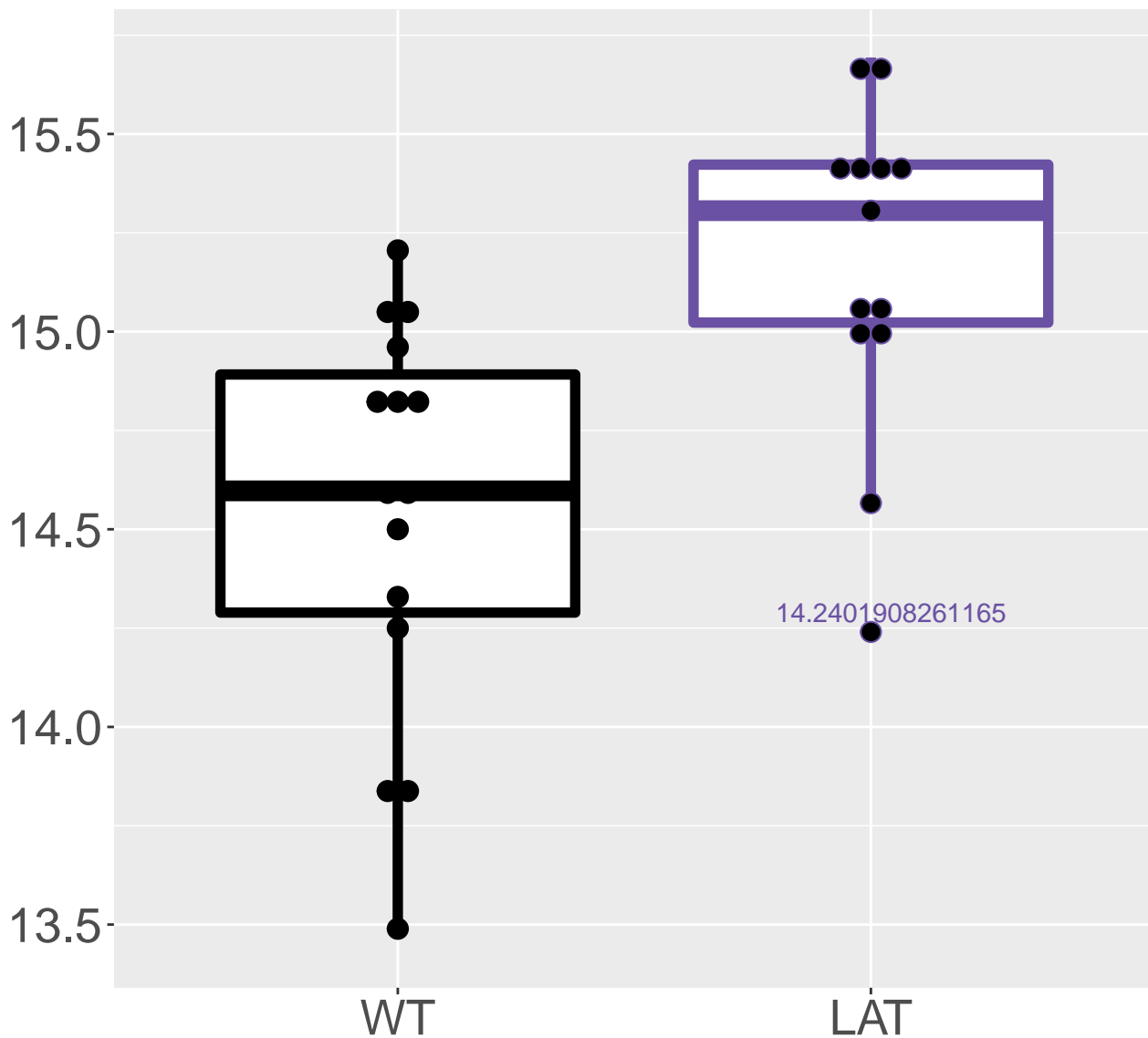
**M76.0289T492.39**

**FDR = 0.0084, FC = -0.42**

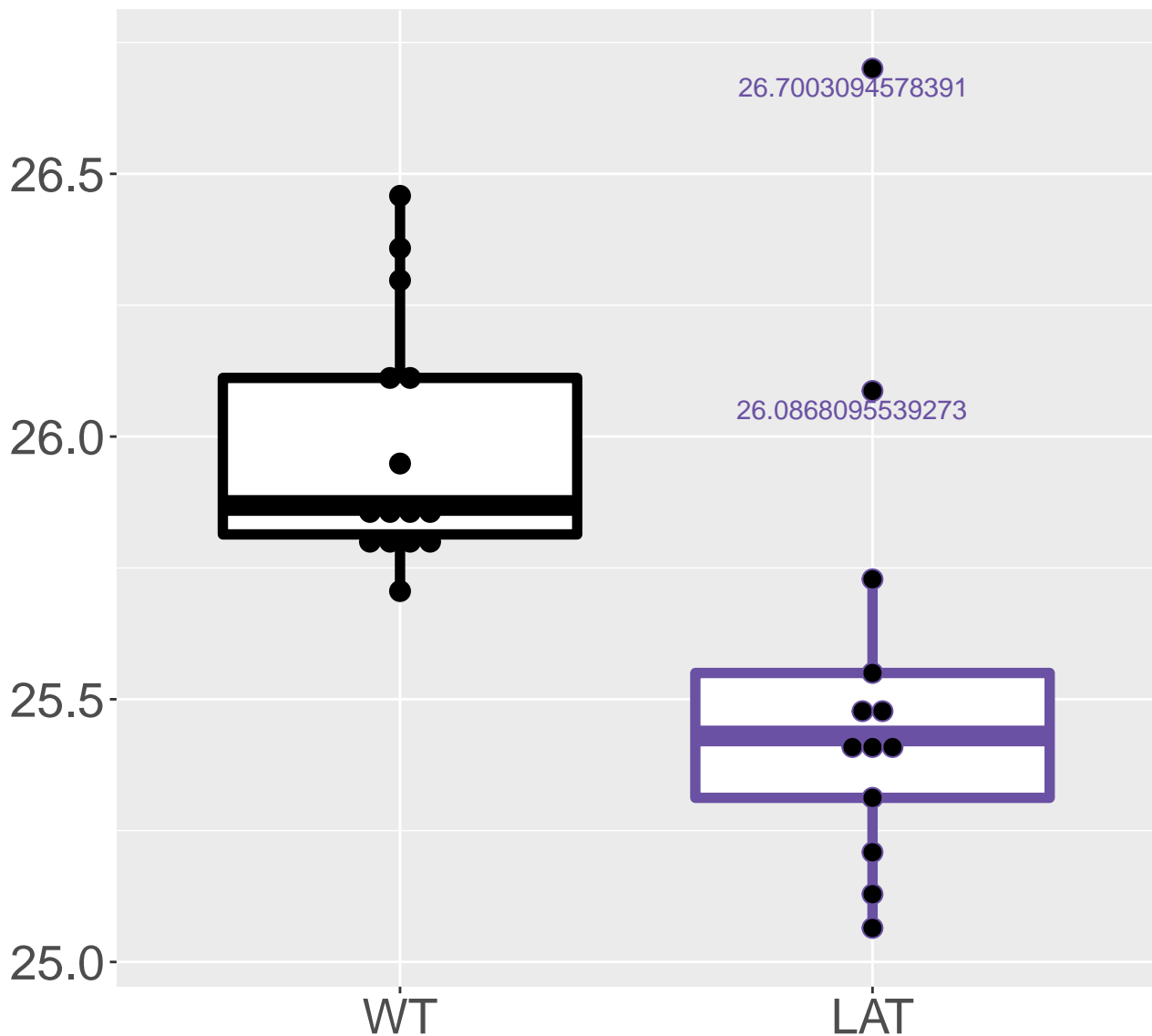




**FDR = 0.0084, FC = 0.63**

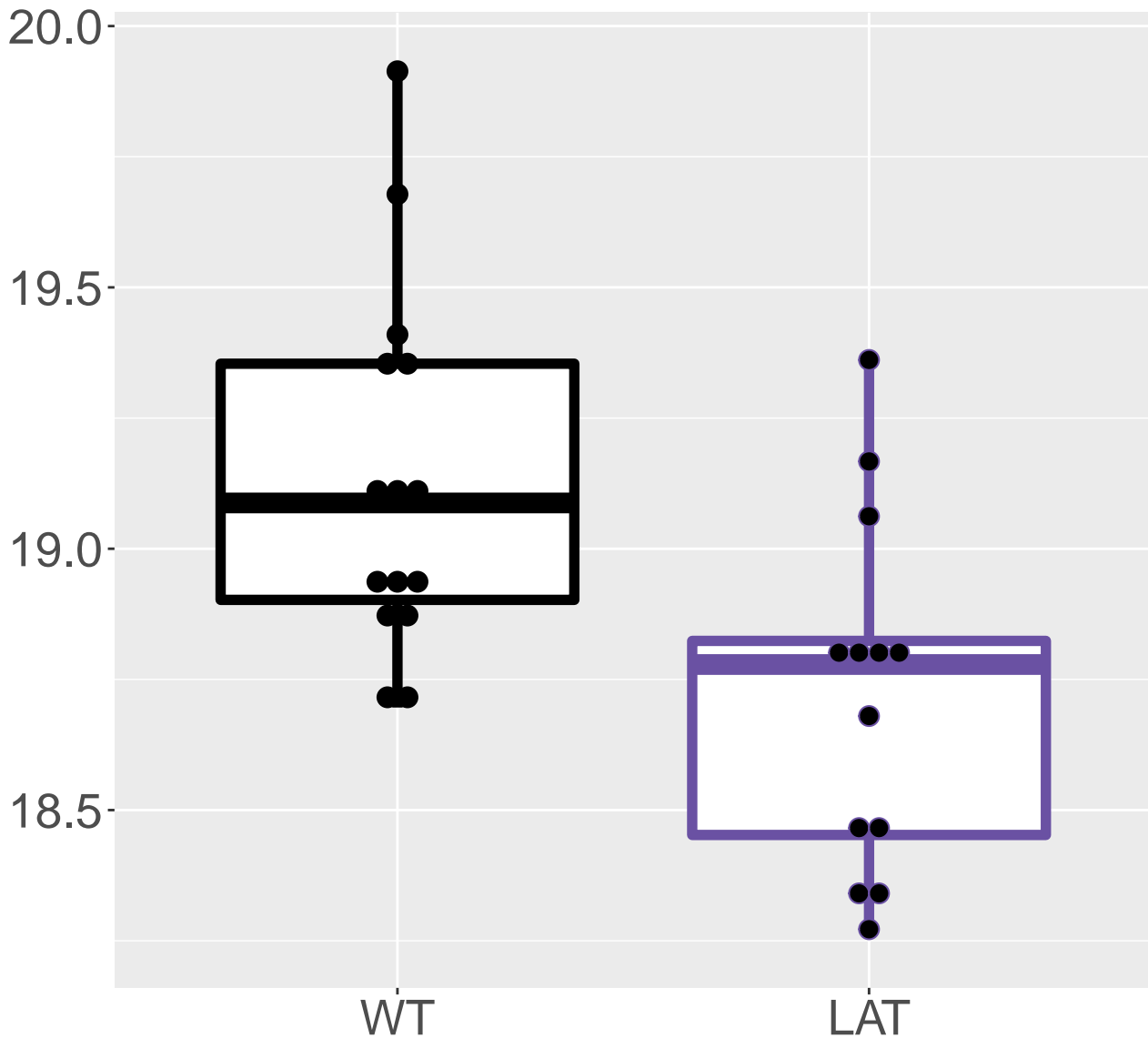


D-(+)-Trehalose;  $\hat{I}_{\pm}, \hat{I}_{\pm}$ -Trehalose|Maltose; D-M  
FDR = 0.0086, FC = -0.44



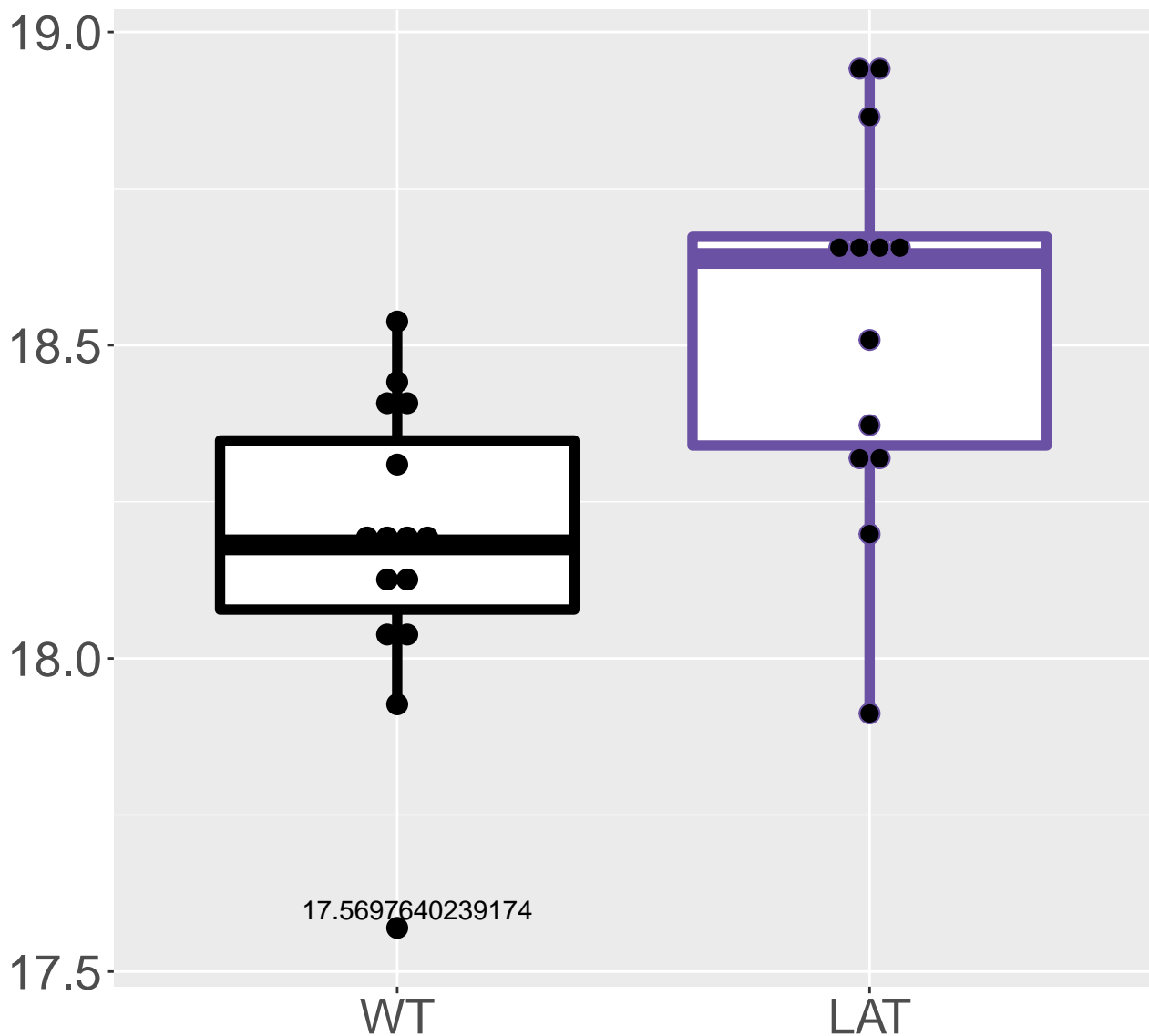
**M391.1099T496.05**

**FDR = 0.0086, FC = -0.41**



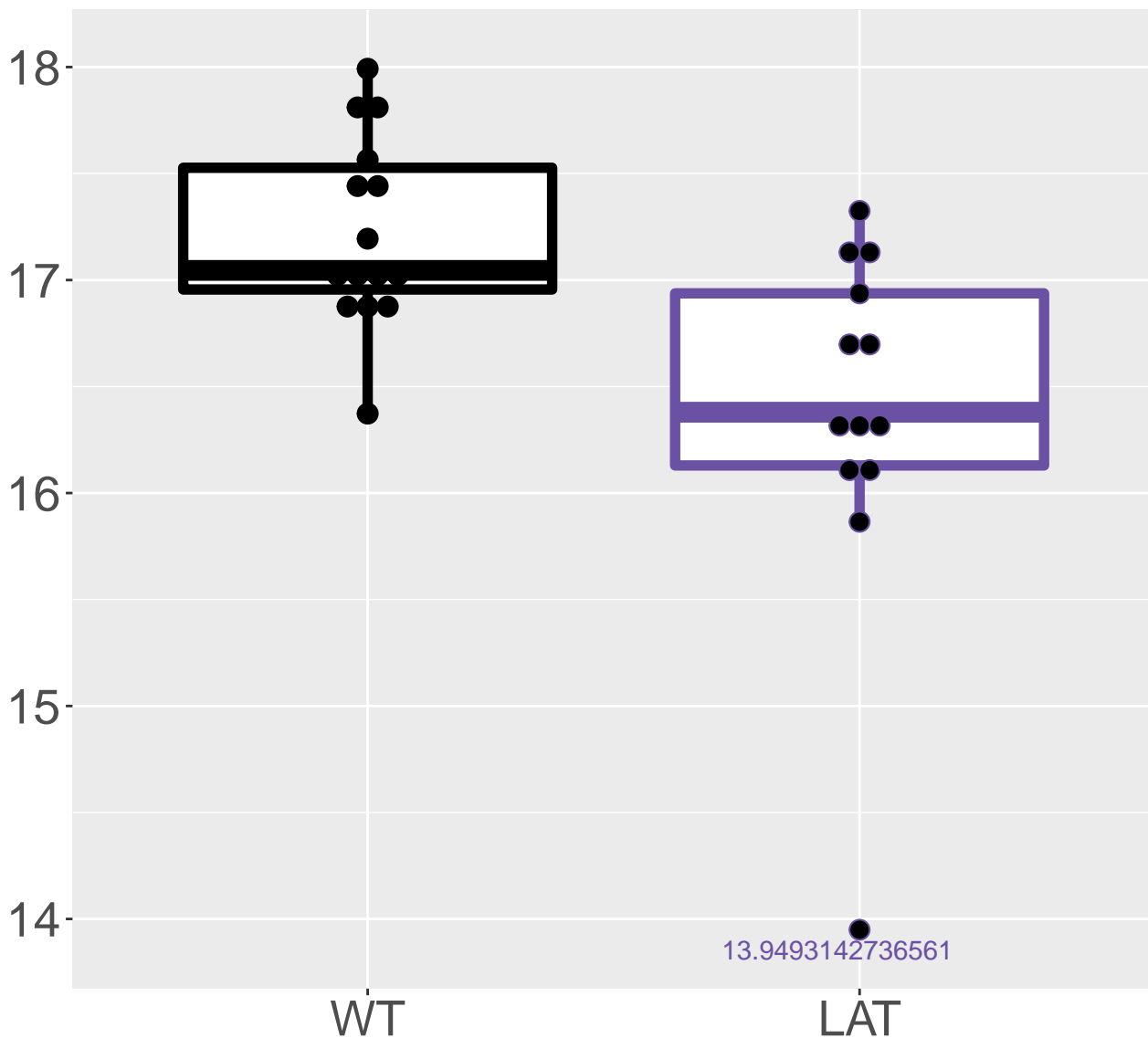
**M357.1045T539.75**

**FDR = 0.0086, FC = 0.36**



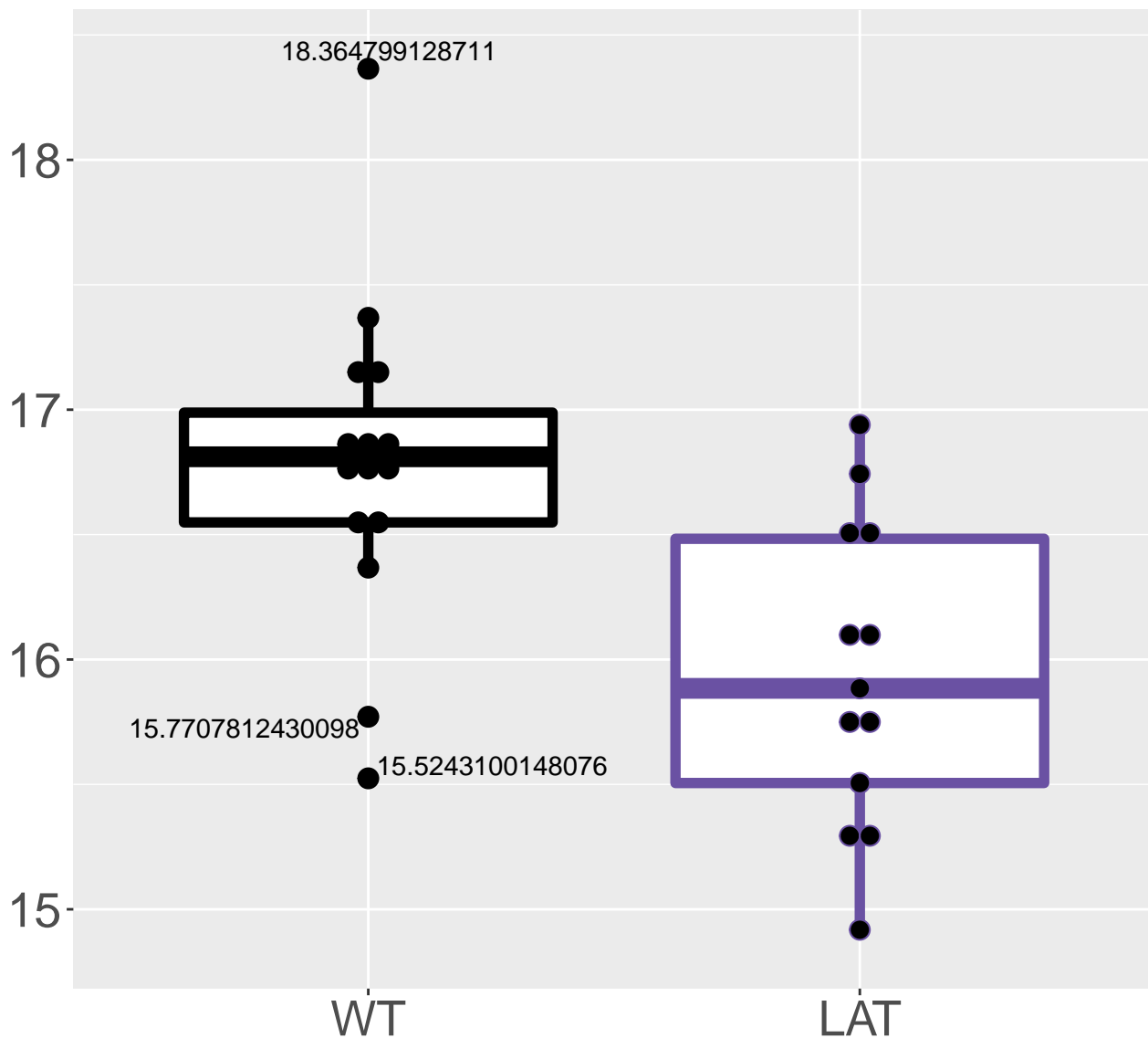
**M264.1091T488.65**

**FDR = 0.0087, FC = -0.85**

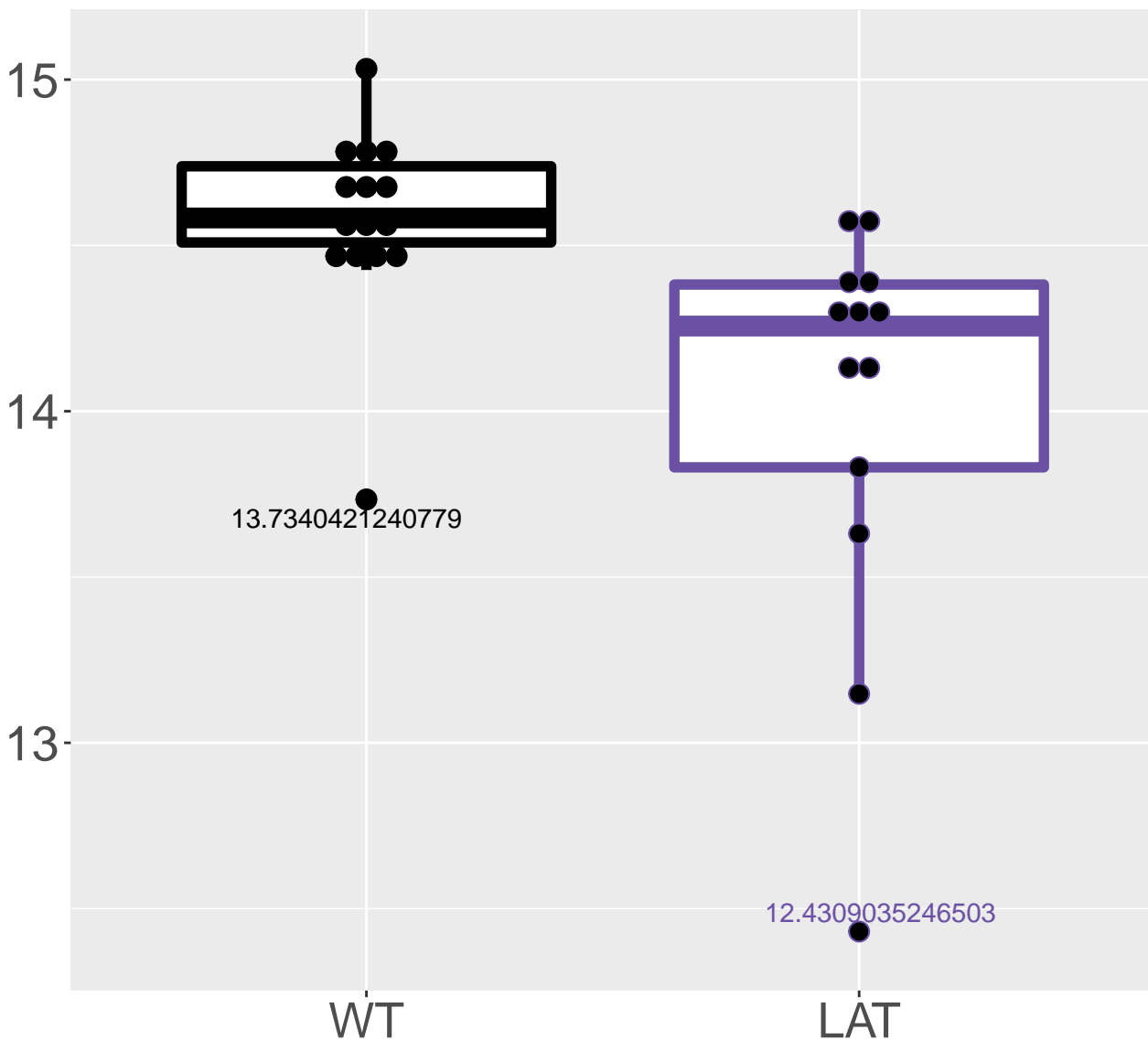


**M222.0444T397.16**

**FDR = 0.0087, FC = -0.84**

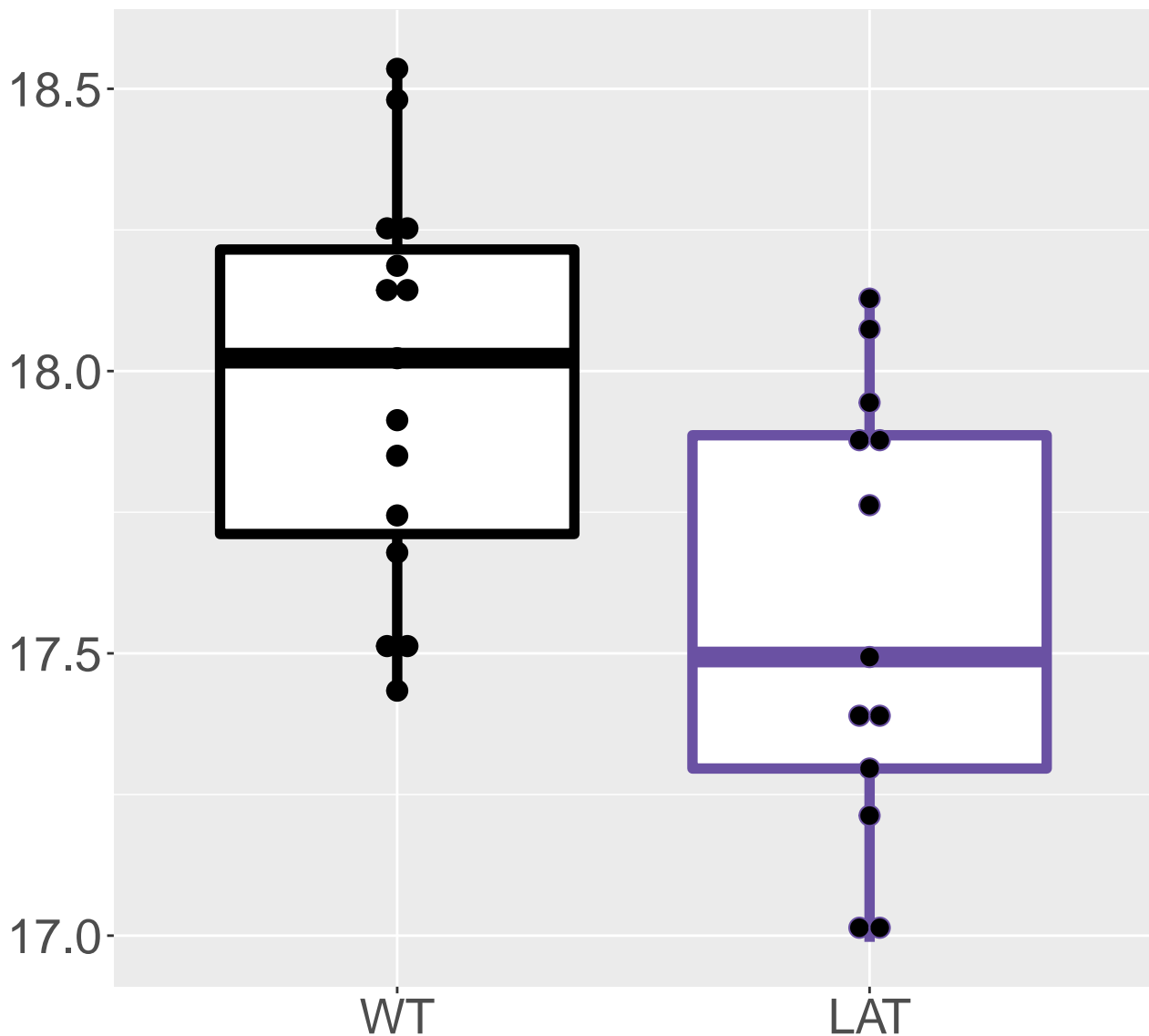


**FDR = 0.0087, FC = -0.57**



**N6-Acetyl-L-lysine**

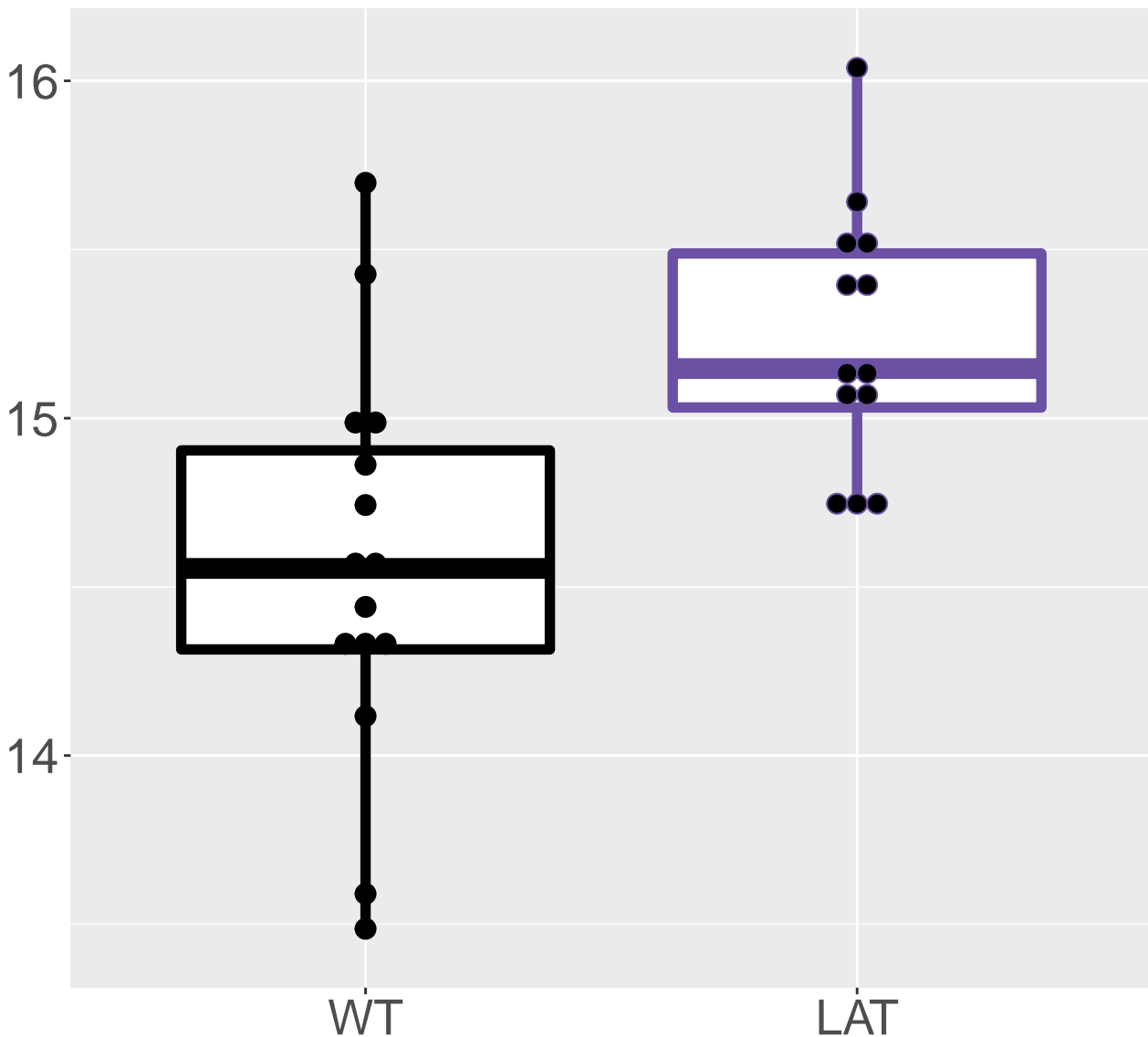
**FDR = 0.0089, FC = -0.4, sex\*\***





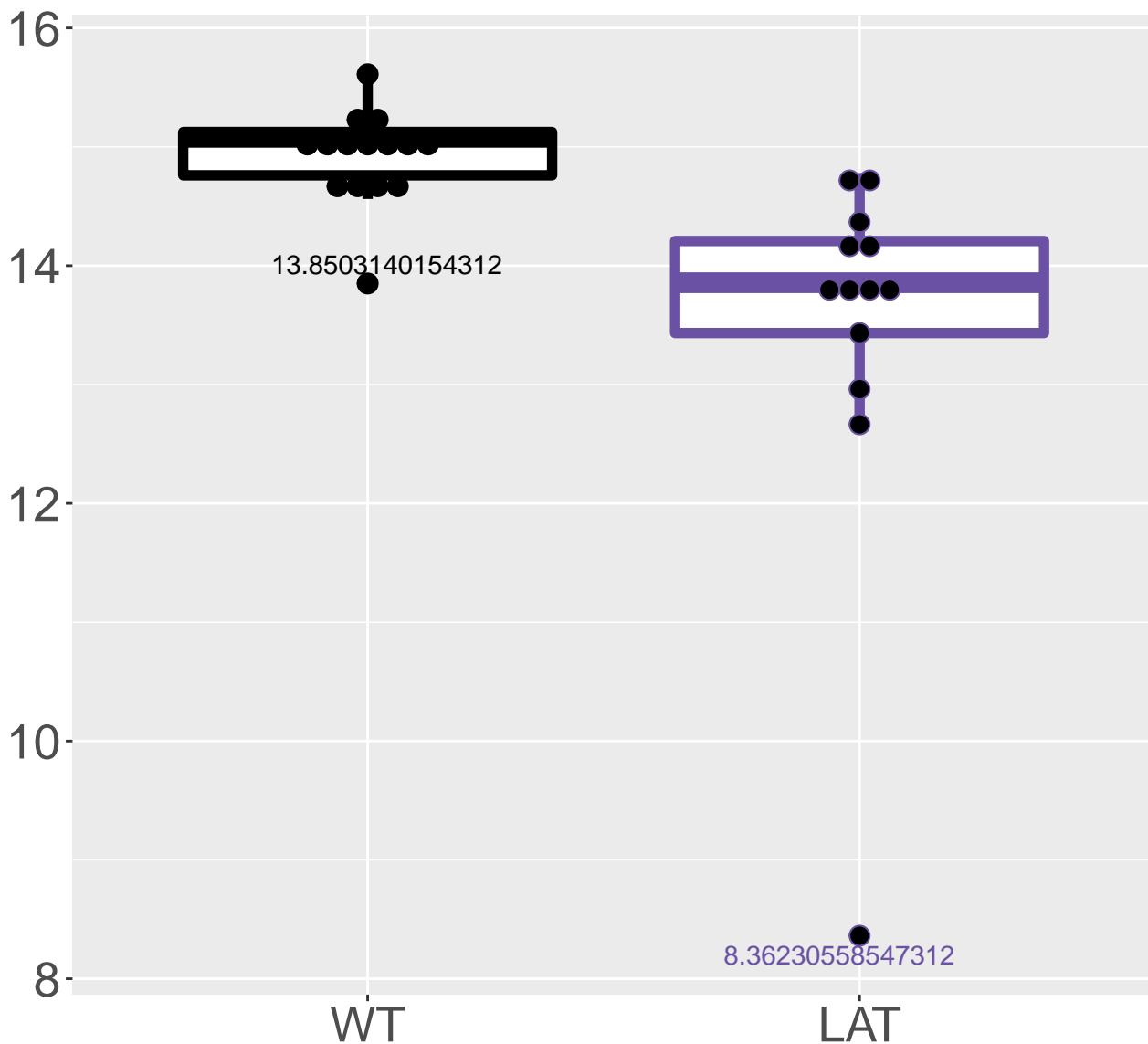
**M215.9702T348.54**

**FDR = 0.0091, FC = 0.68**



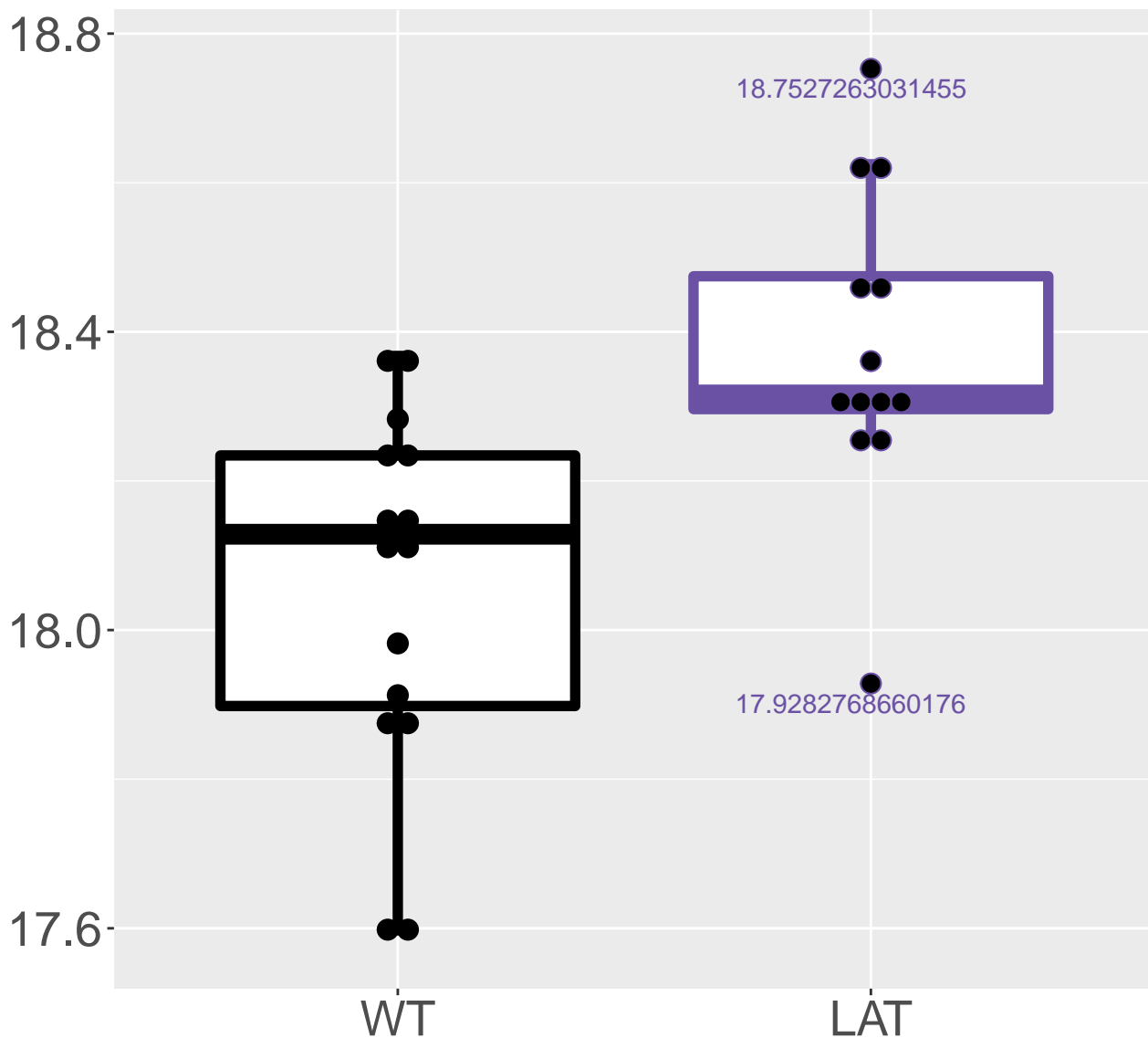
**M255.084T207.05**

**FDR = 0.0091, FC = -1.5**



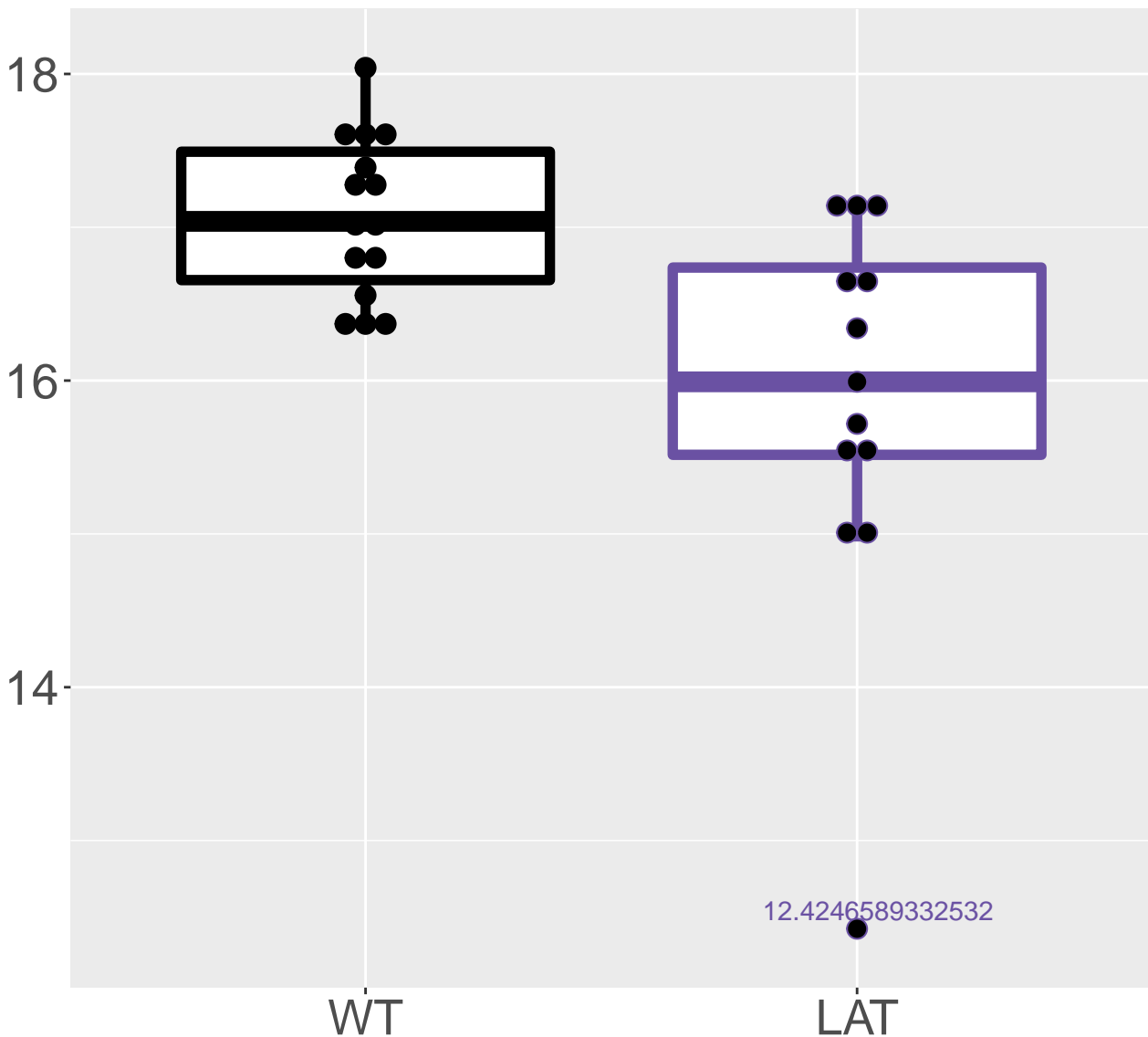
**M629.1354T561.18**

**FDR = 0.0092, FC = 0.32**

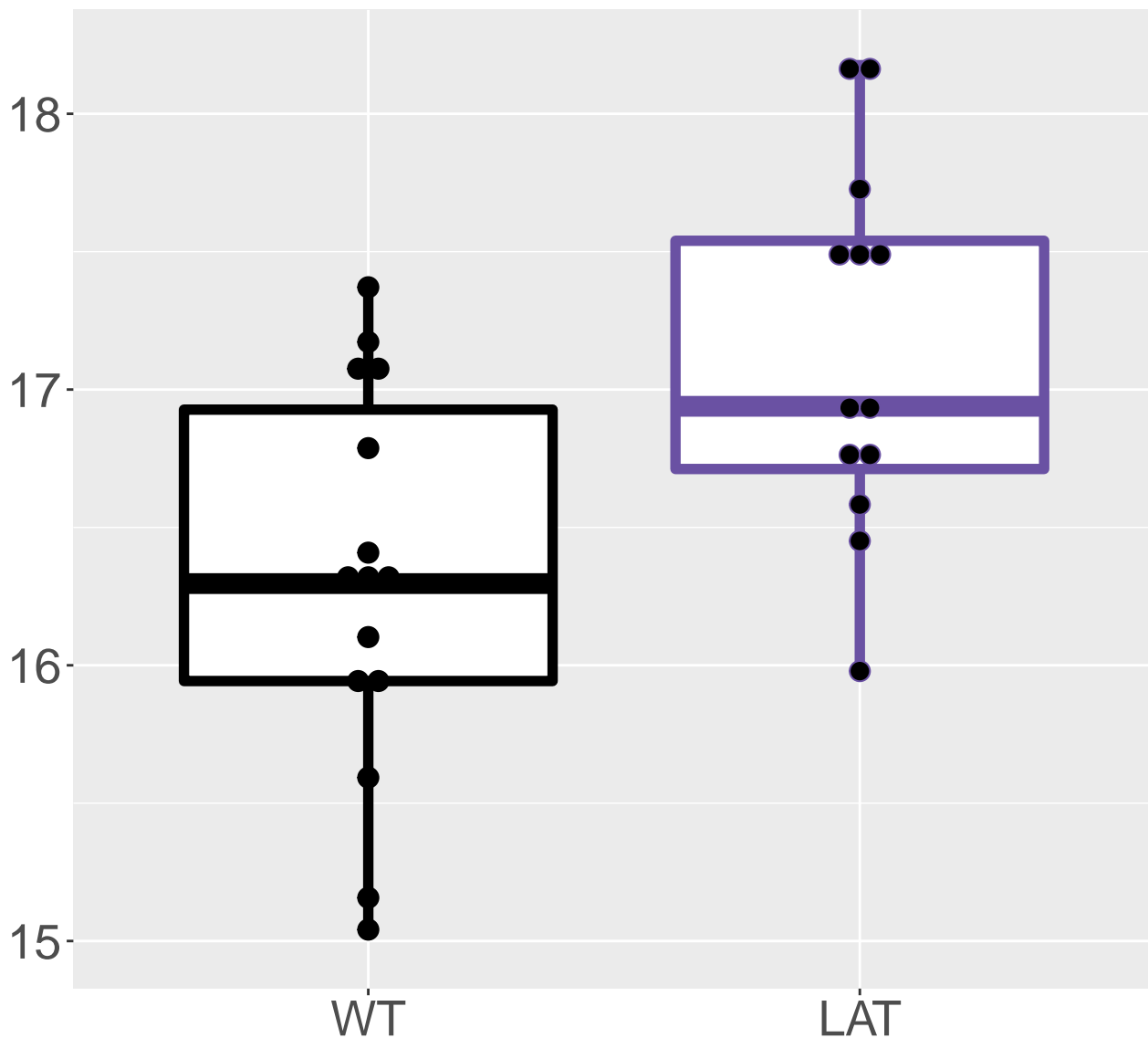


**M400.1123T168.39**

**FDR = 0.0092, FC = -1.2**

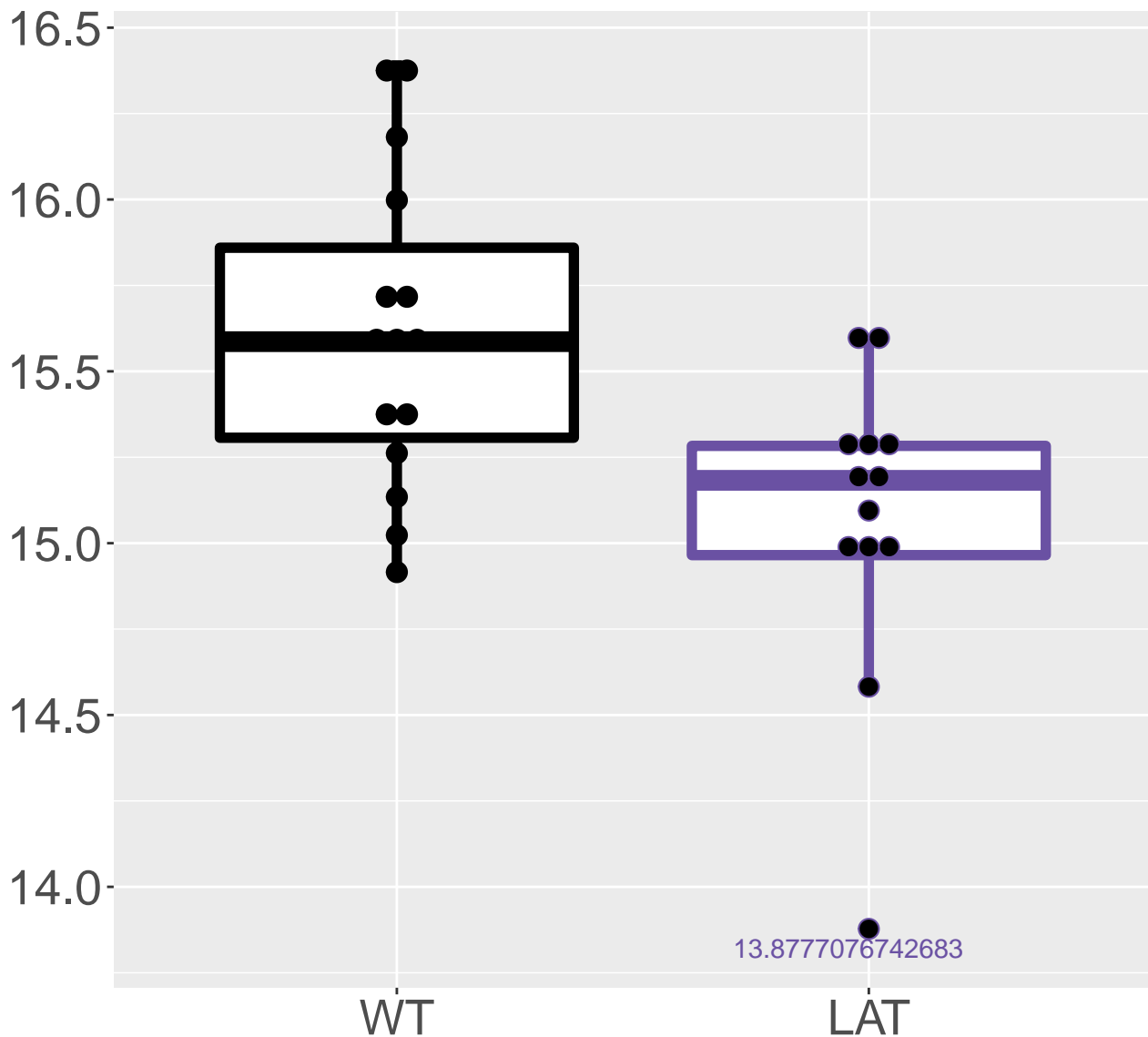


**4-Hydroxybenzaldehyde|Benzoic acid**  
**FDR = 0.0092, FC = 0.84**

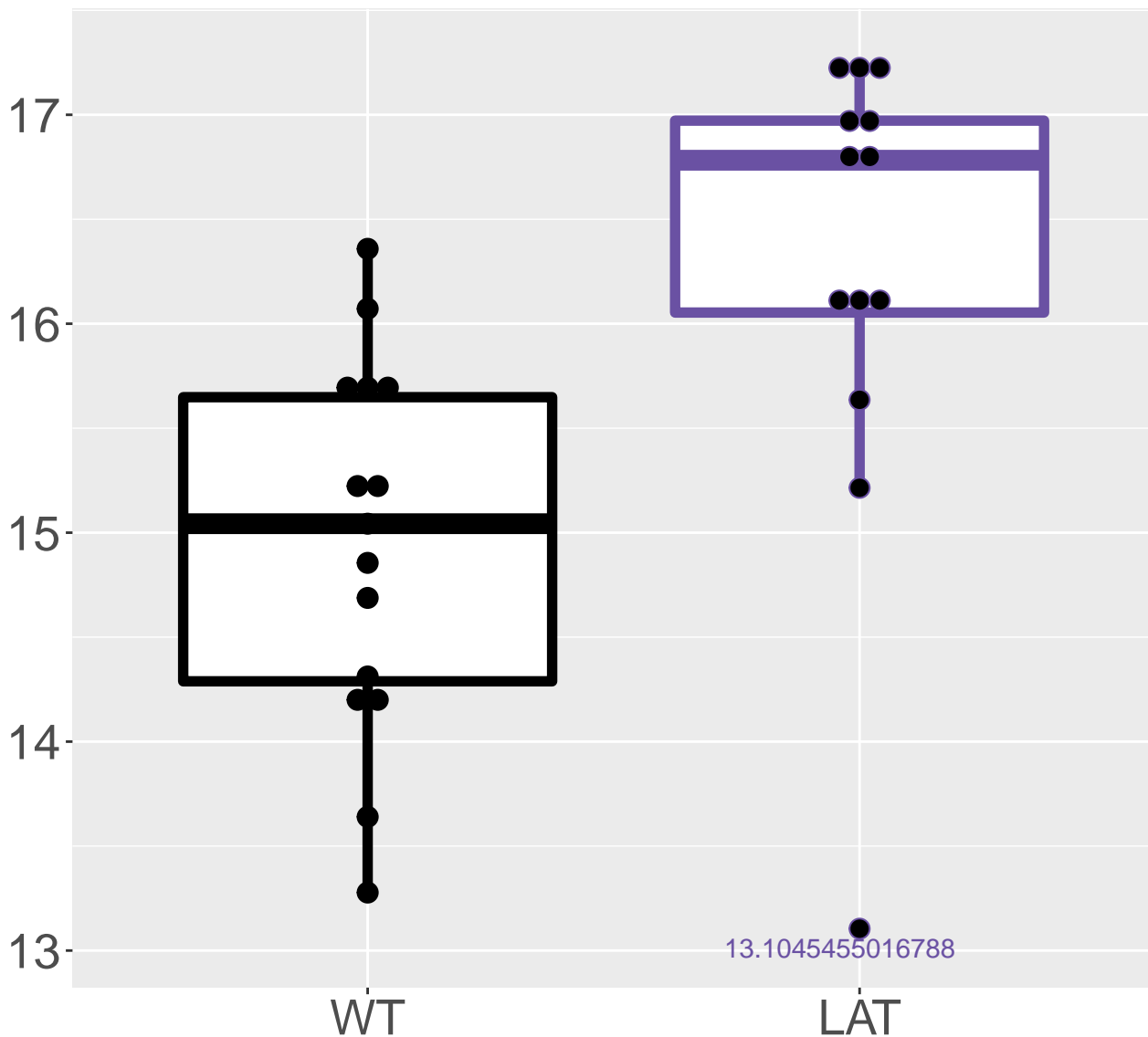


**M434.1575T177.67**

**FDR = 0.0092, FC = -0.54**

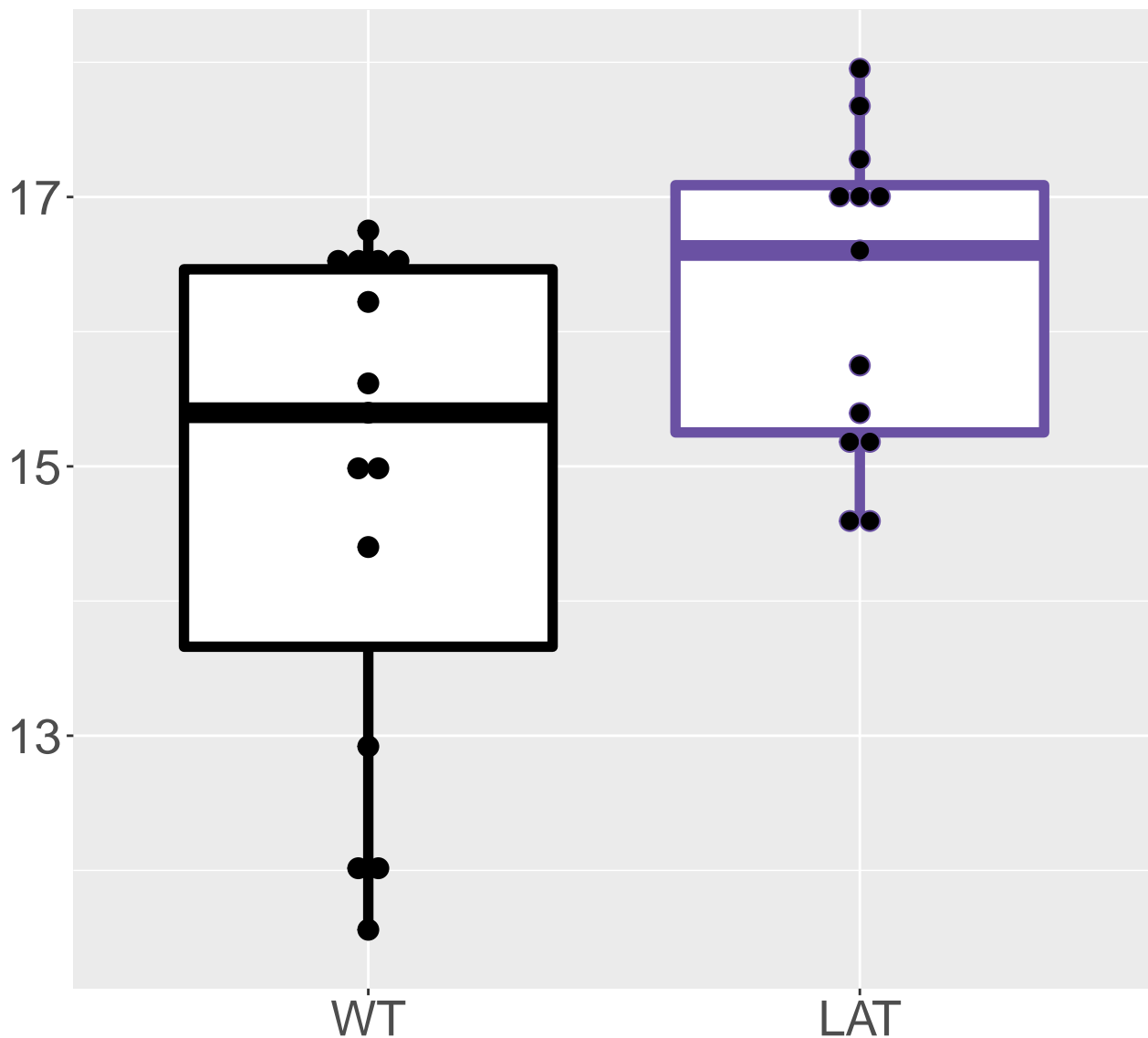


**M966.2048T597.57**  
**FDR = 0.0092, FC = 1.3**



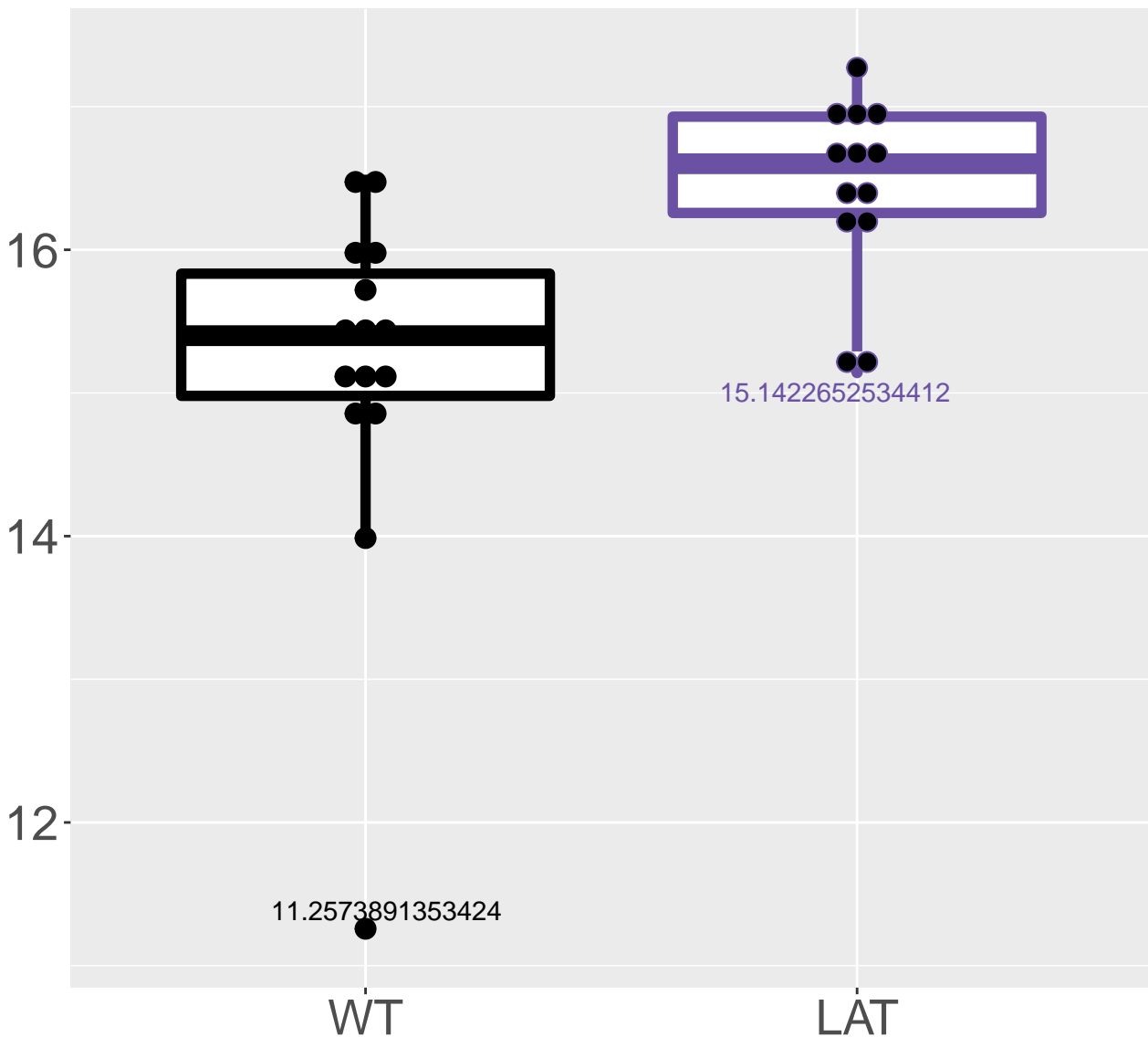
**M423.1278T312.66**

**FDR = 0.0093, FC = 1.4, sex\*\*\***

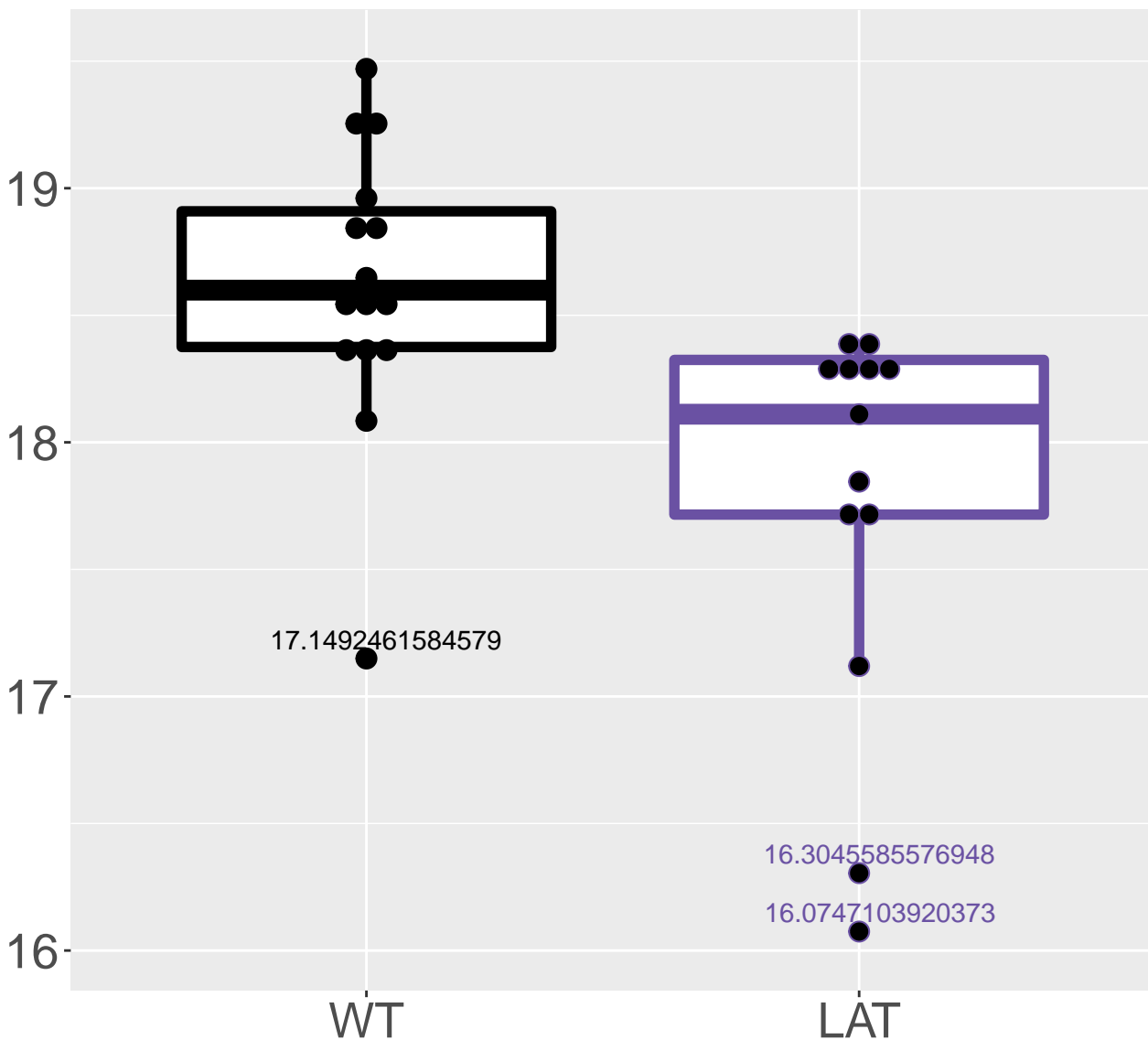




**M351.0701T526.21**  
**FDR = 0.0093, FC = 1.3**

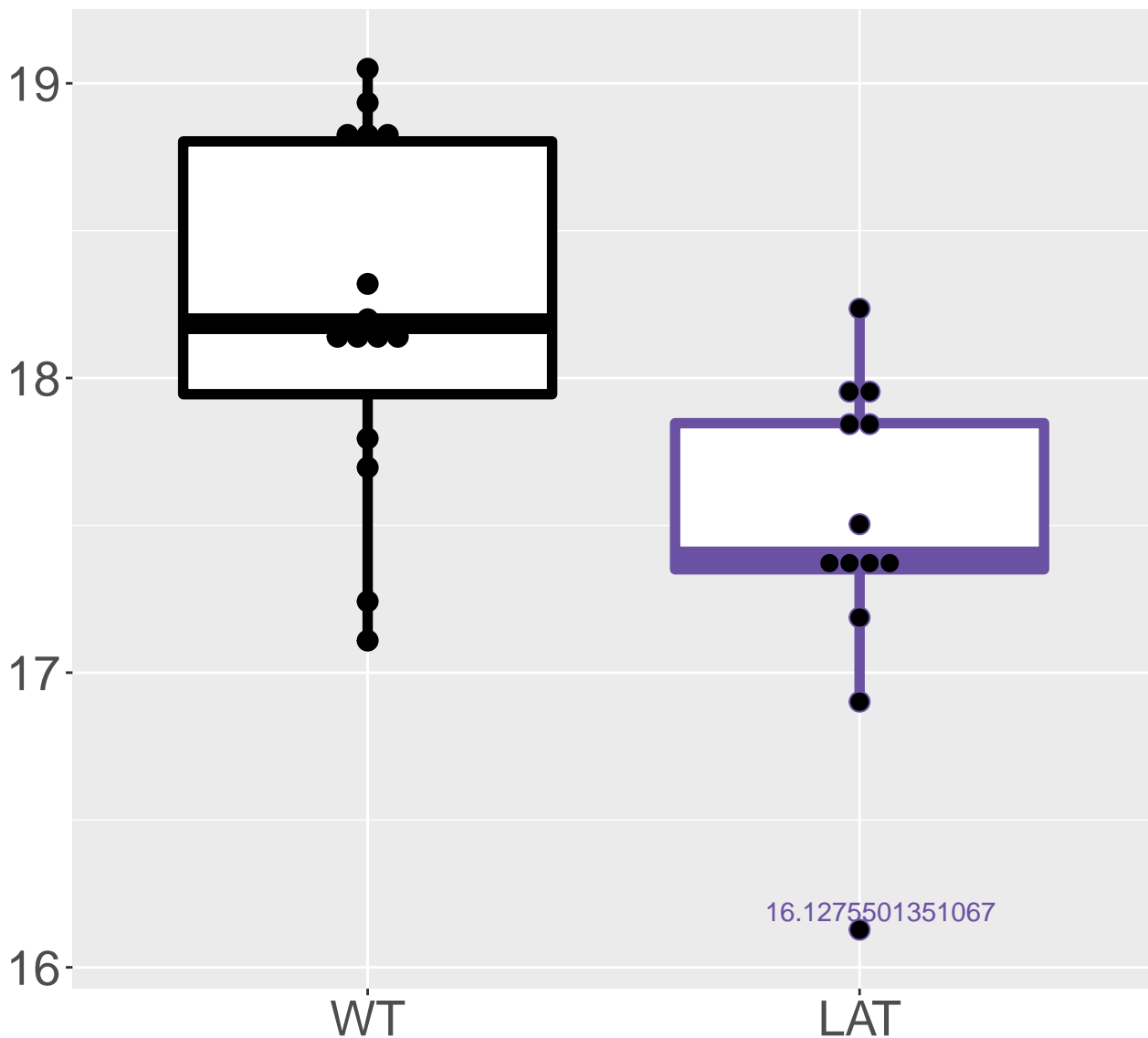


**FDR = 0.0093, FC = -0.85**



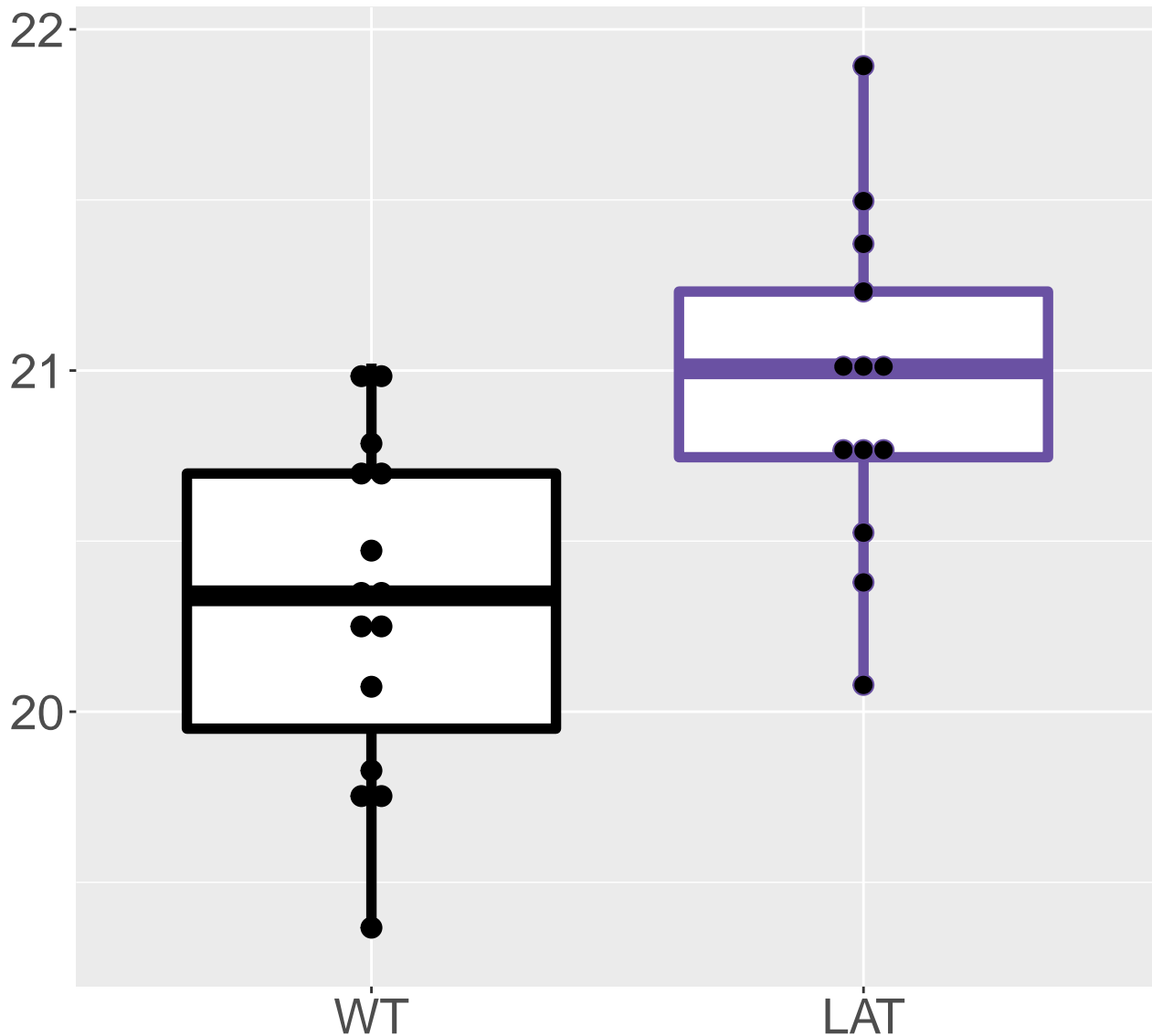
**M312.0861T394.32**

**FDR = 0.0093, FC = -0.75**



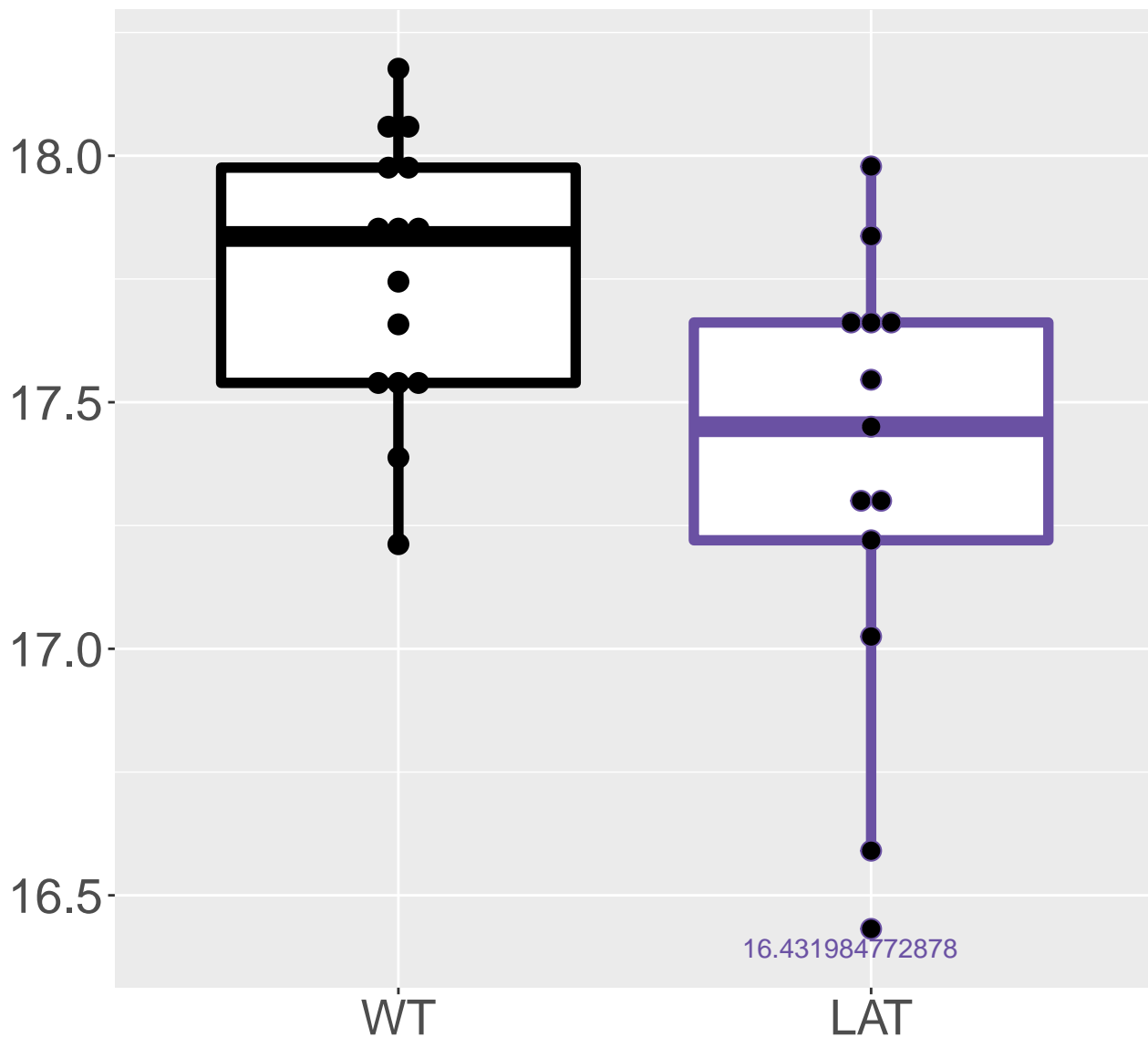
**M123.9888T229.96**

**FDR = 0.0093, FC = 0.64**

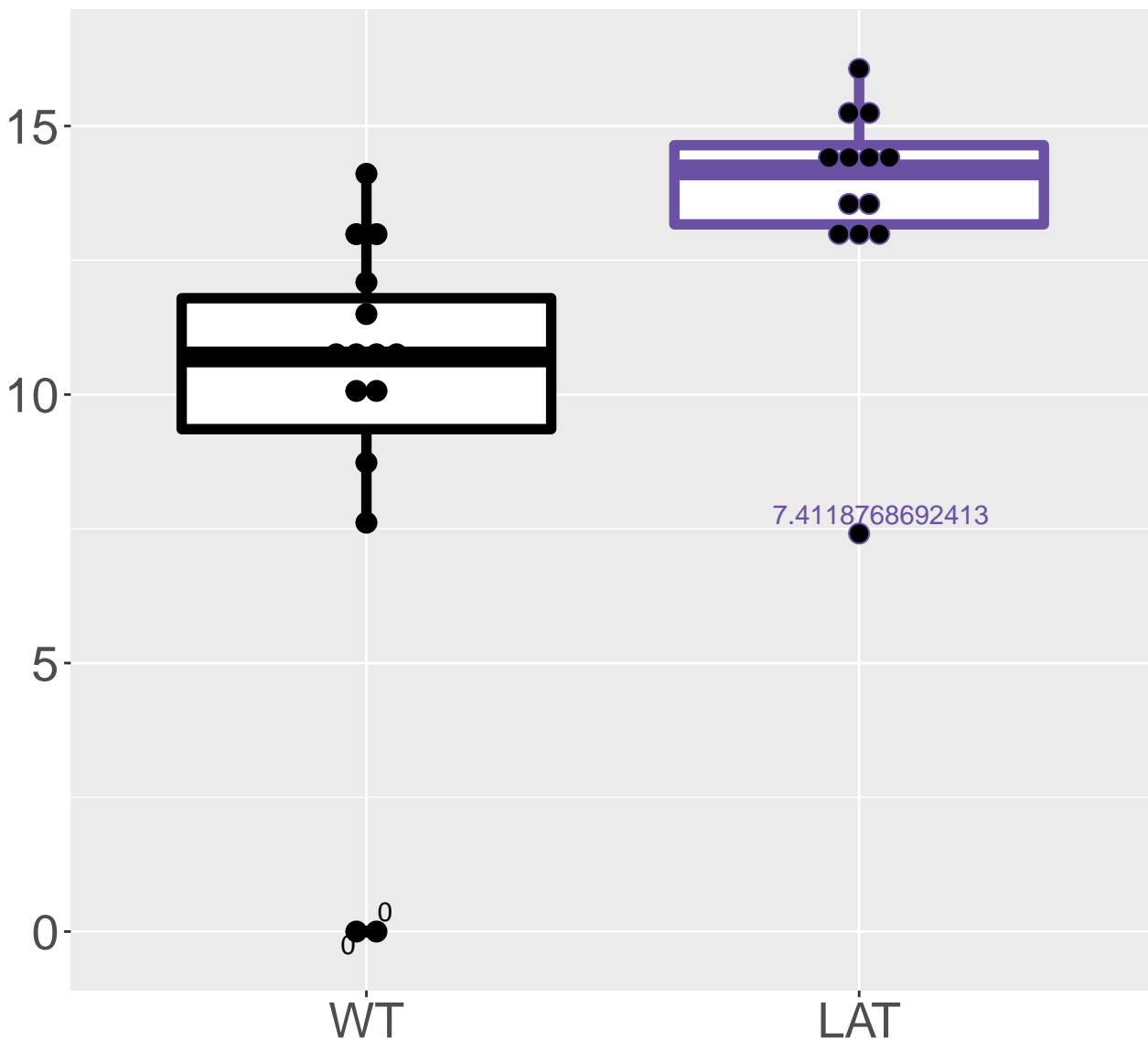


**M224.0779T440.4**

**FDR = 0.0093, FC = -0.4, sex\***

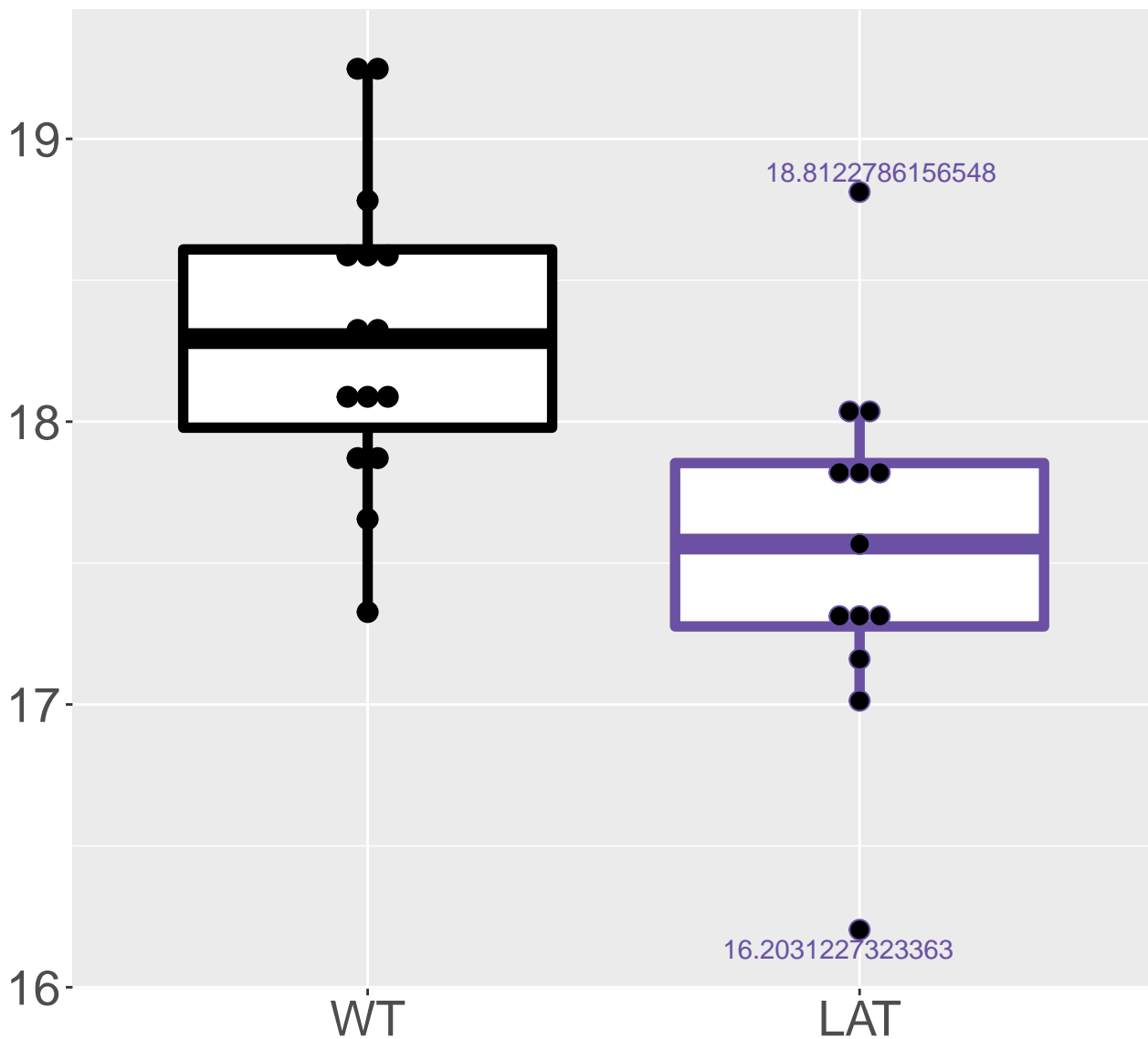


**FDR = 0.0095, FC = 4.1**

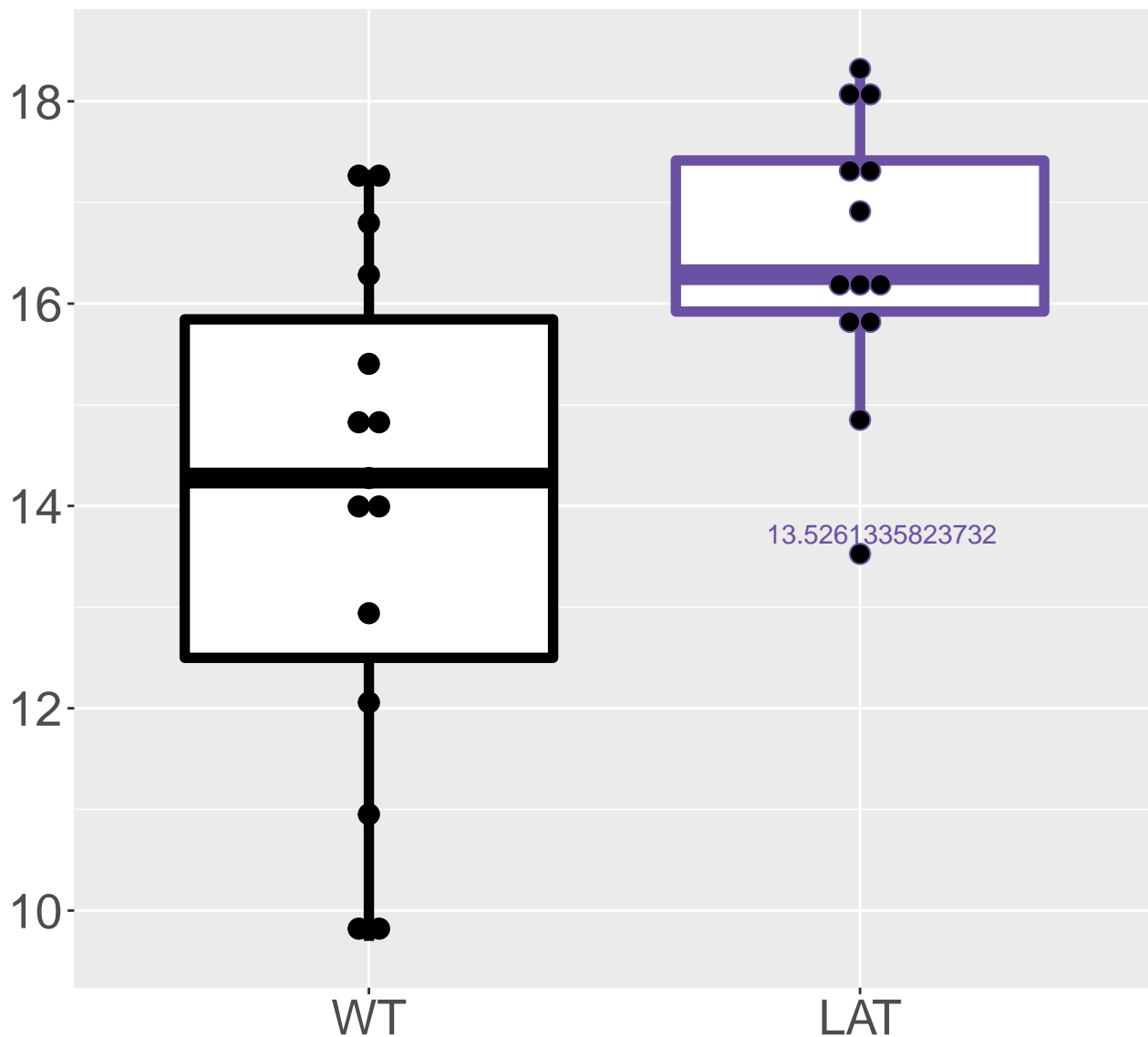


**M364.1367T436.56**

**FDR = 0.0095, FC = -0.76**



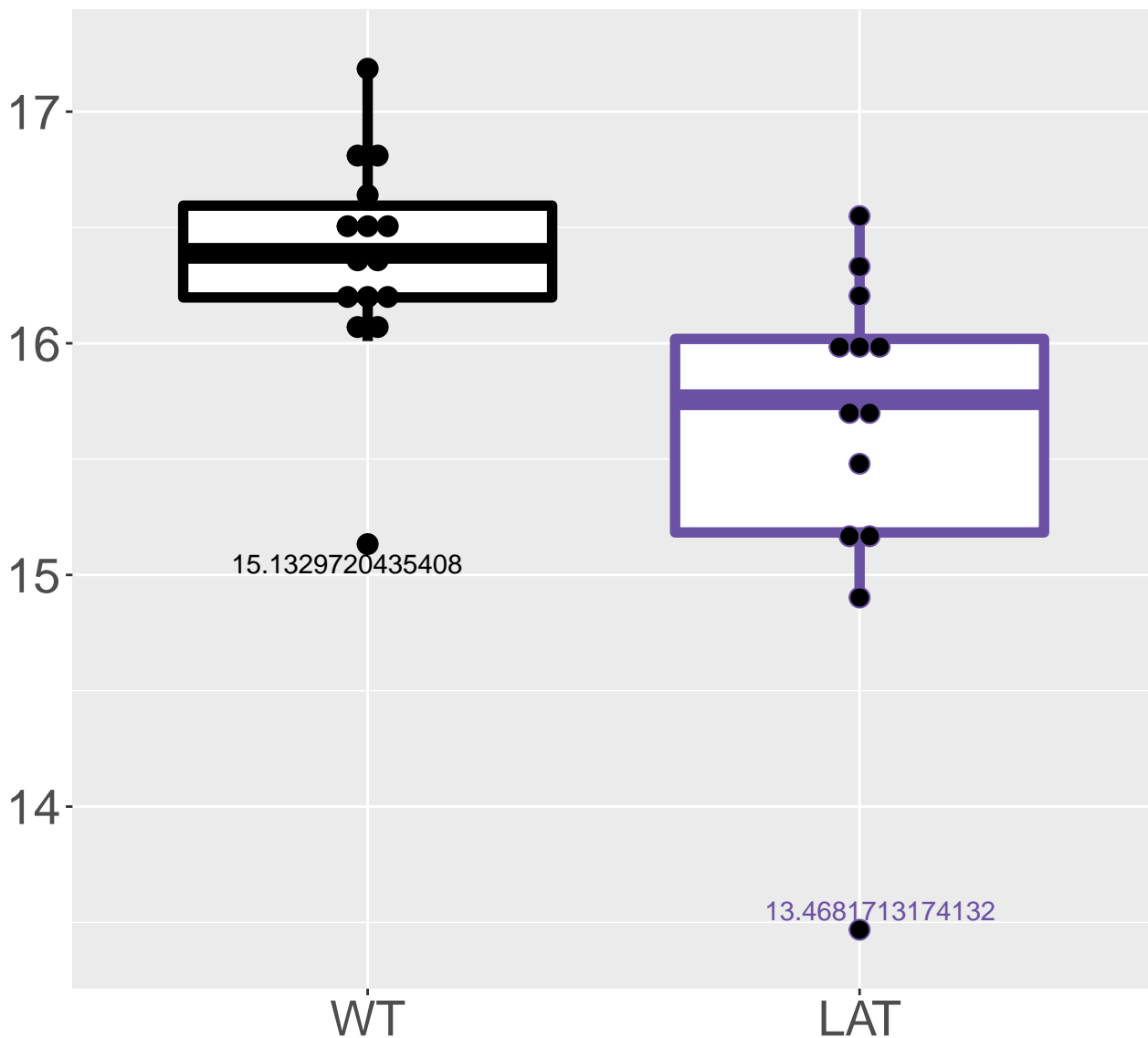
**M301.5317T627.41\_1**  
**FDR = 0.0096, FC = 2.5**





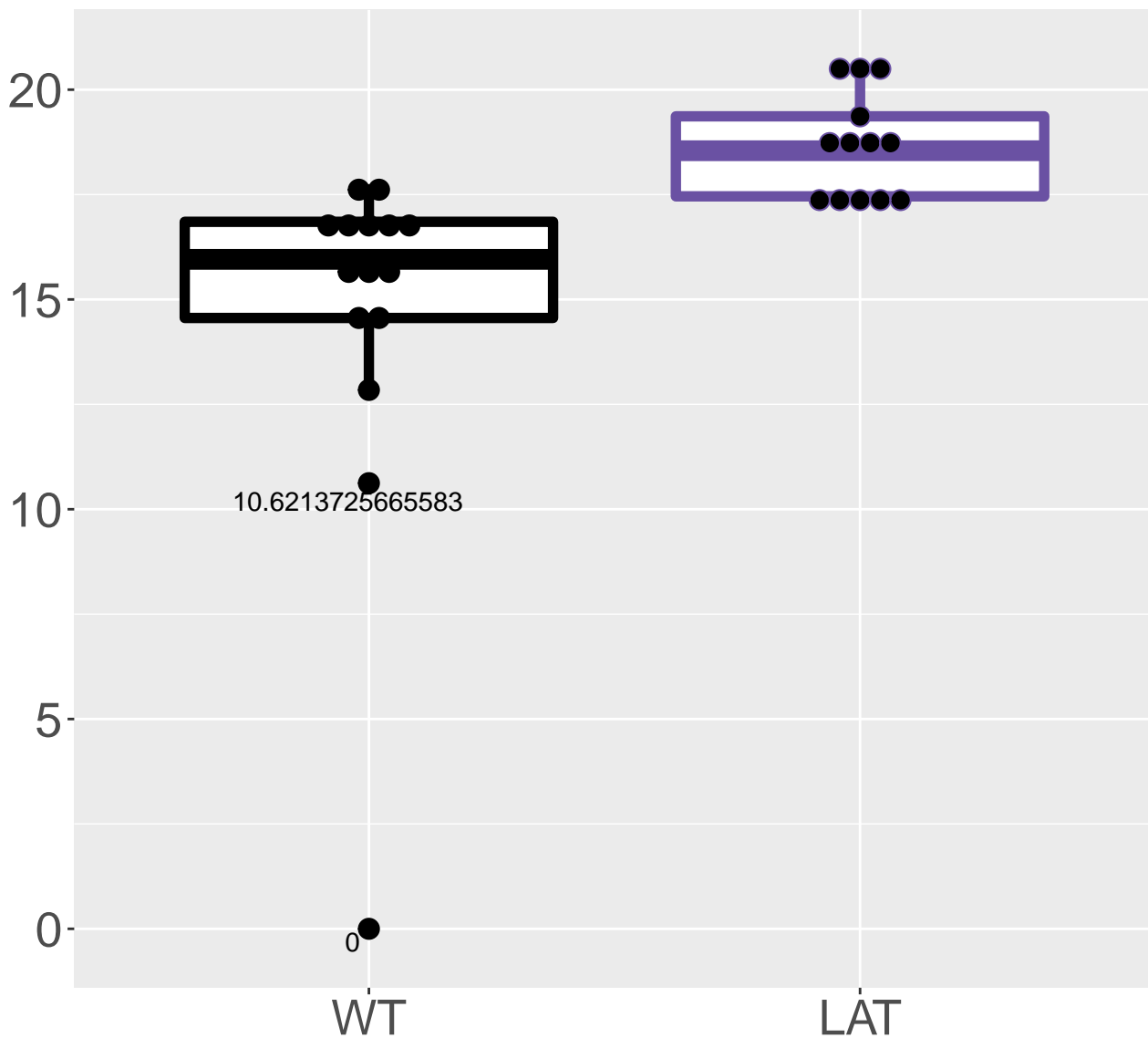
**M94.0404T597.66**

**FDR = 0.0097, FC = -0.79**



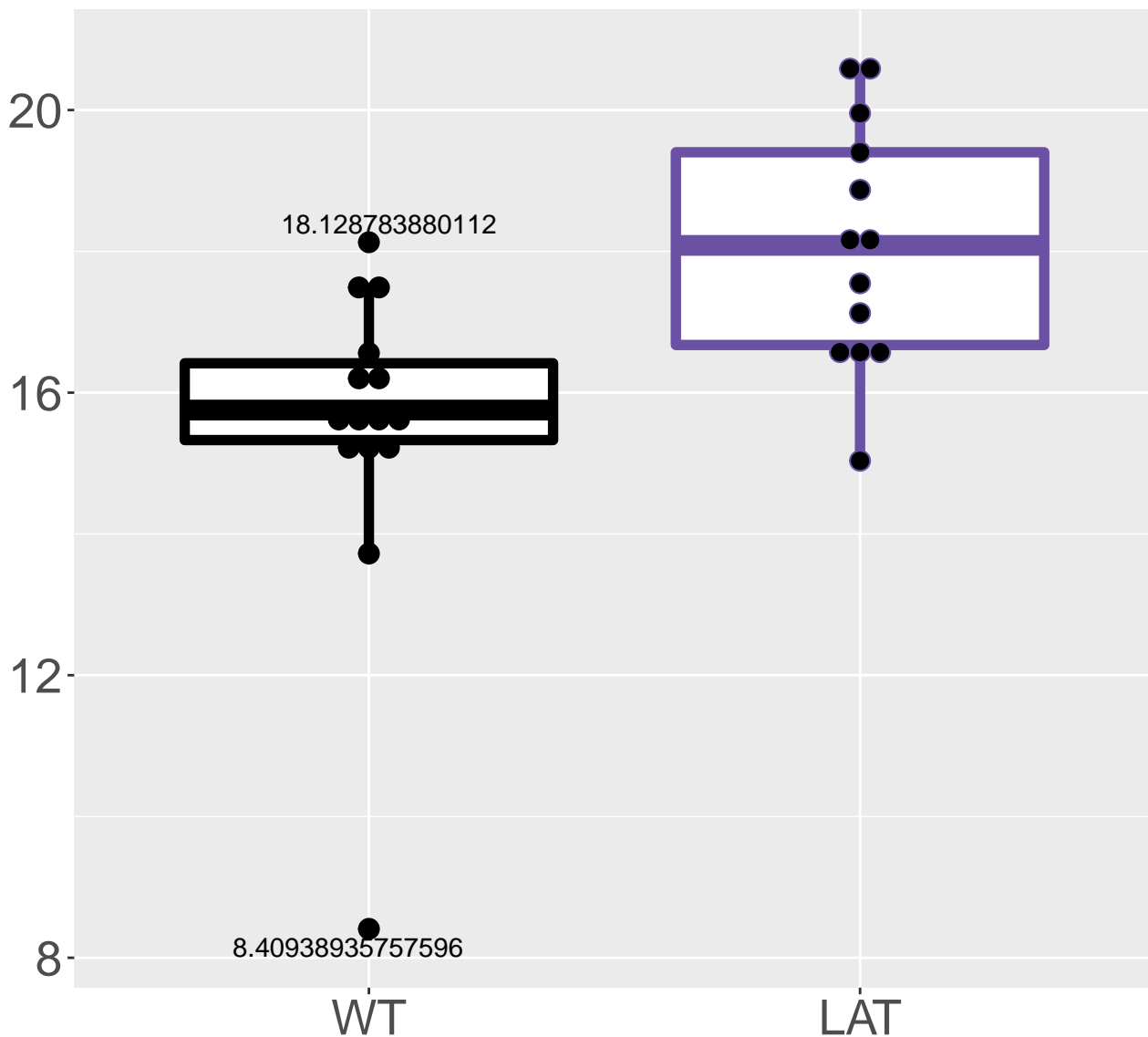
**FDR = 0.0097, FC = 4.1**

**FDR = 0.0097, FC = 4.1**

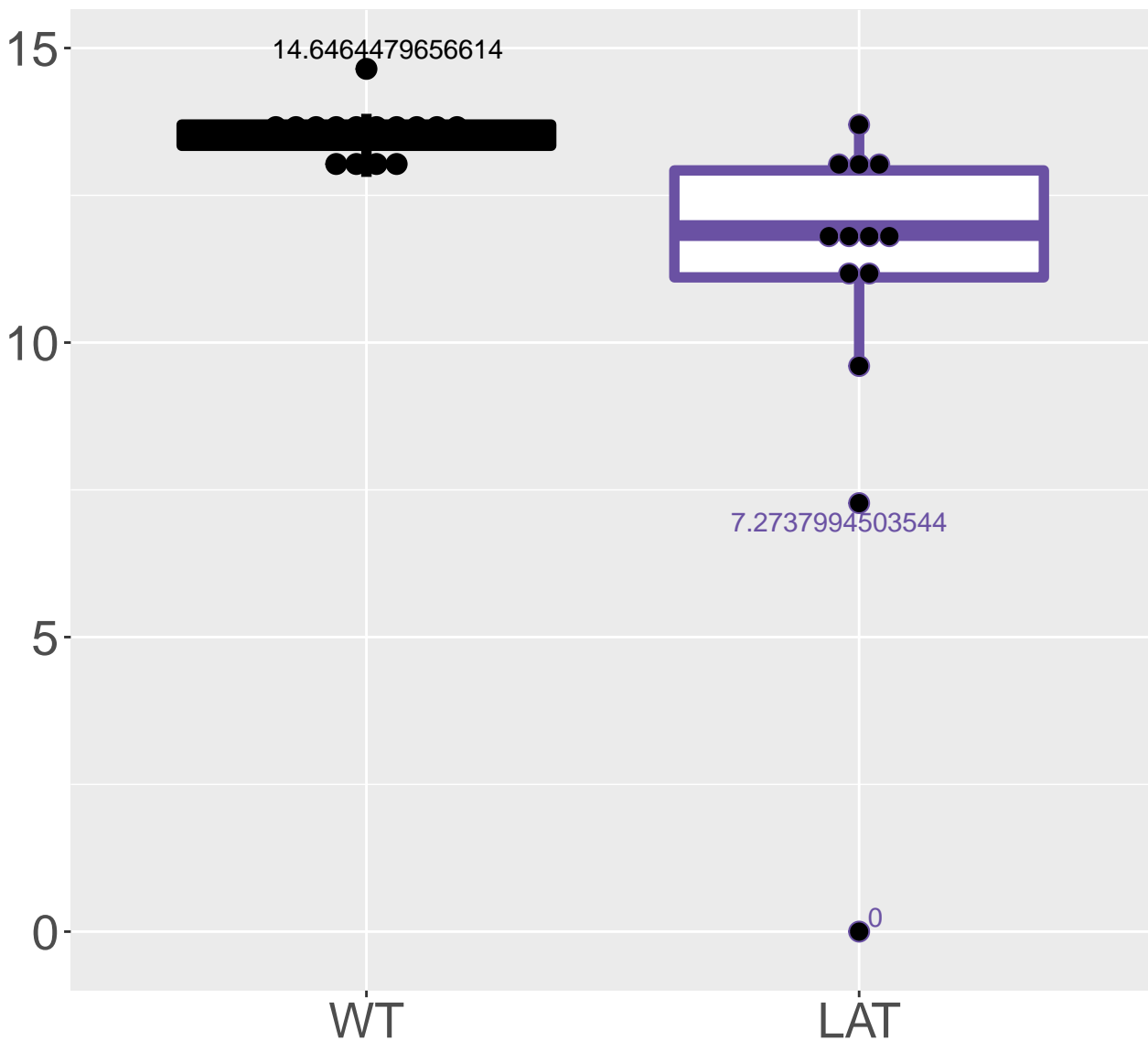


**M144.0125T129.59**

**FDR = 0.01, FC = 2.6**

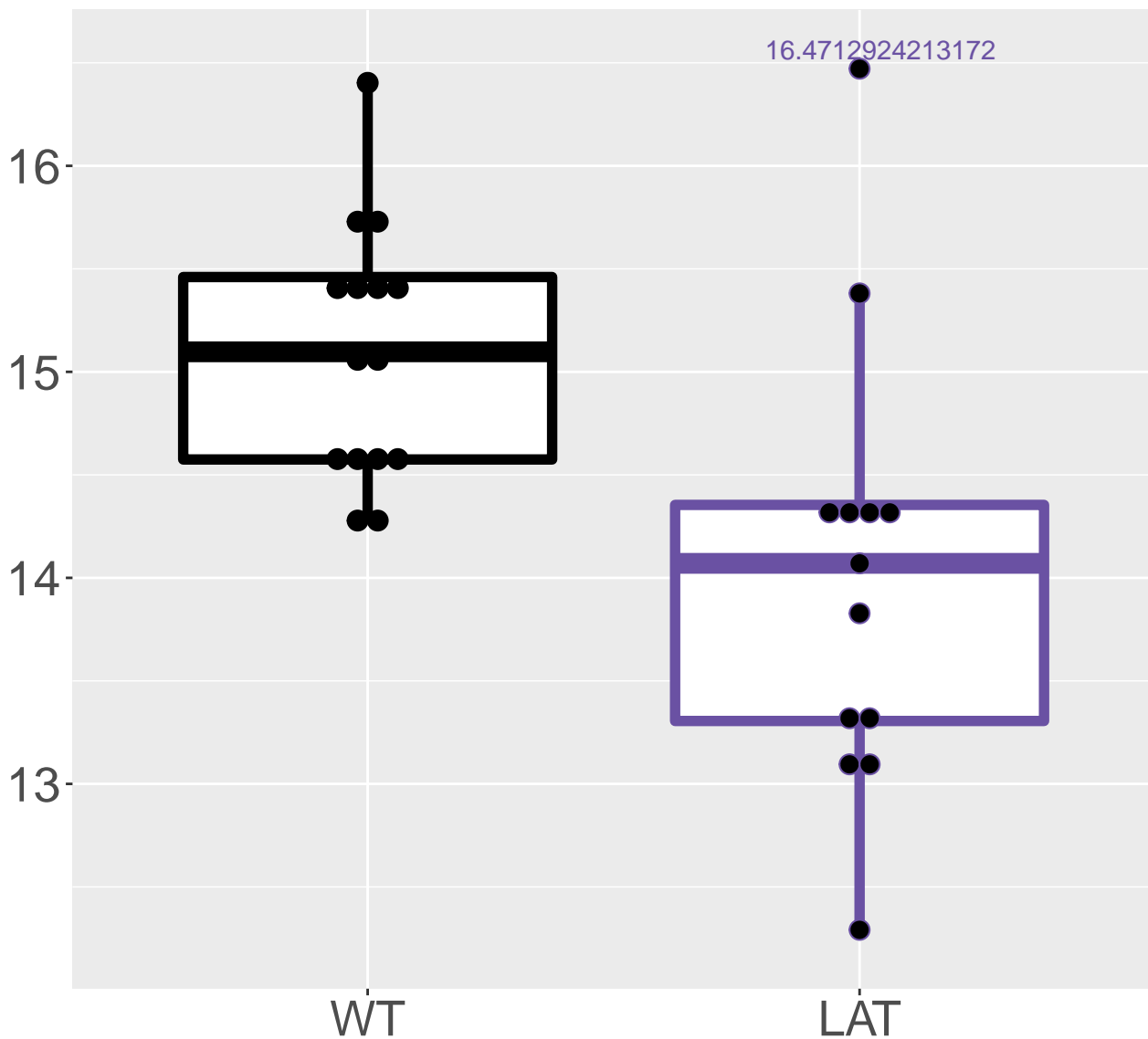


**M102.9236T142.4**  
**FDR = 0.01, FC = -2.8**



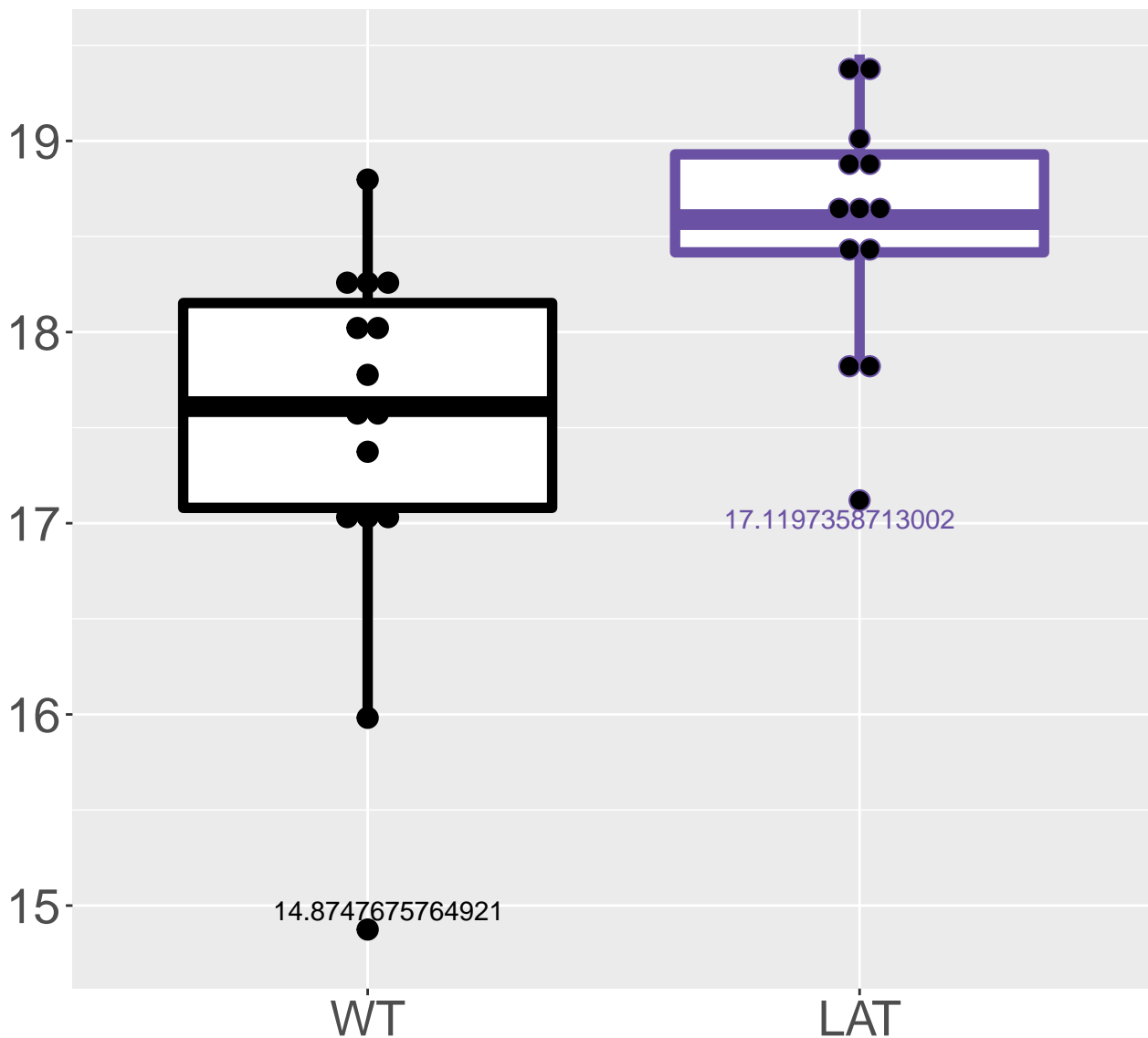
**M981.8182T688.72**

**FDR = 0.01, FC = -1.1**



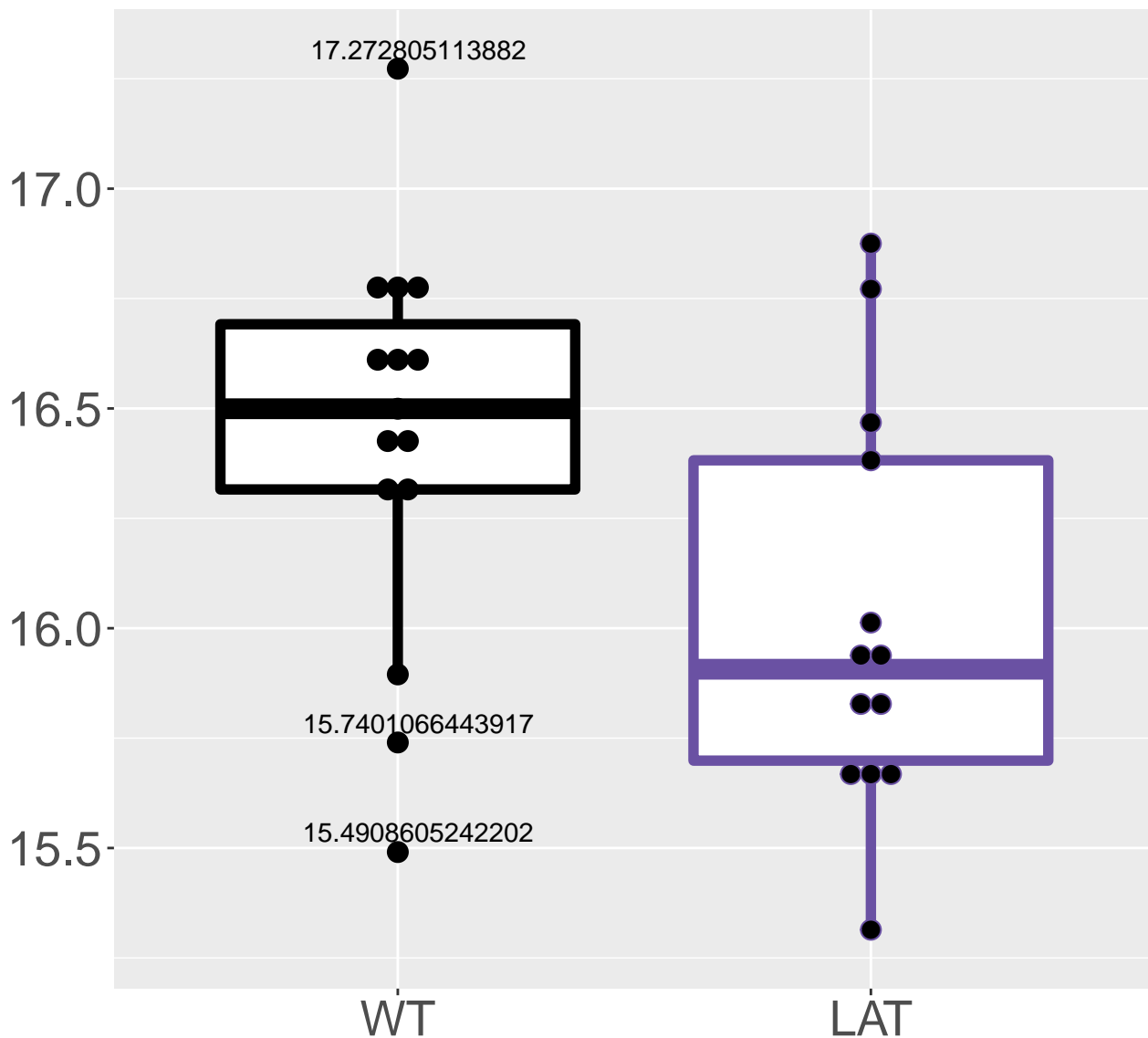
**M267.2898T589.73\_3**

**FDR = 0.01, FC = 1.1**

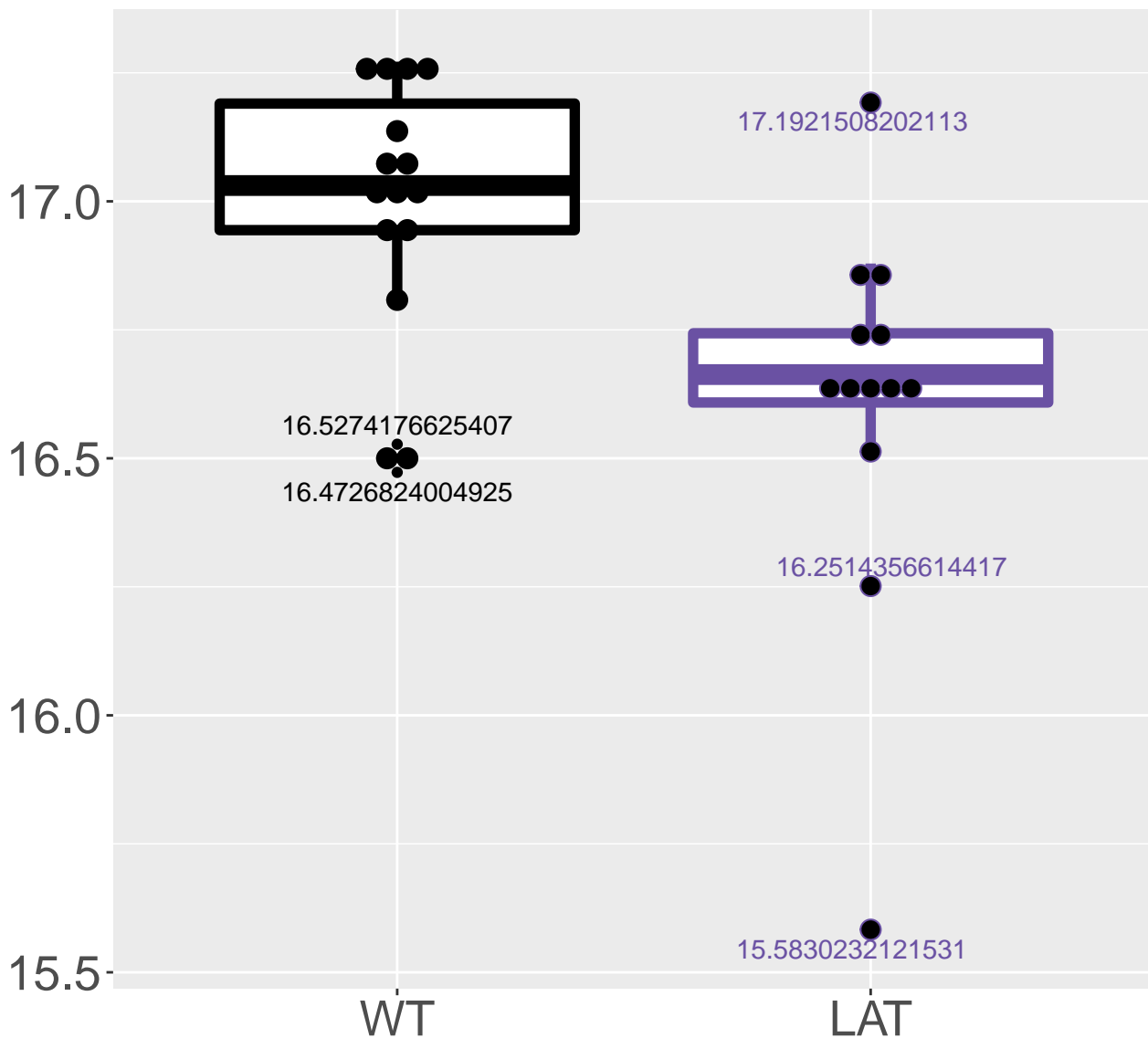


**M225.0883T174.6**

**FDR = 0.011, FC = -0.41, sex\*\***



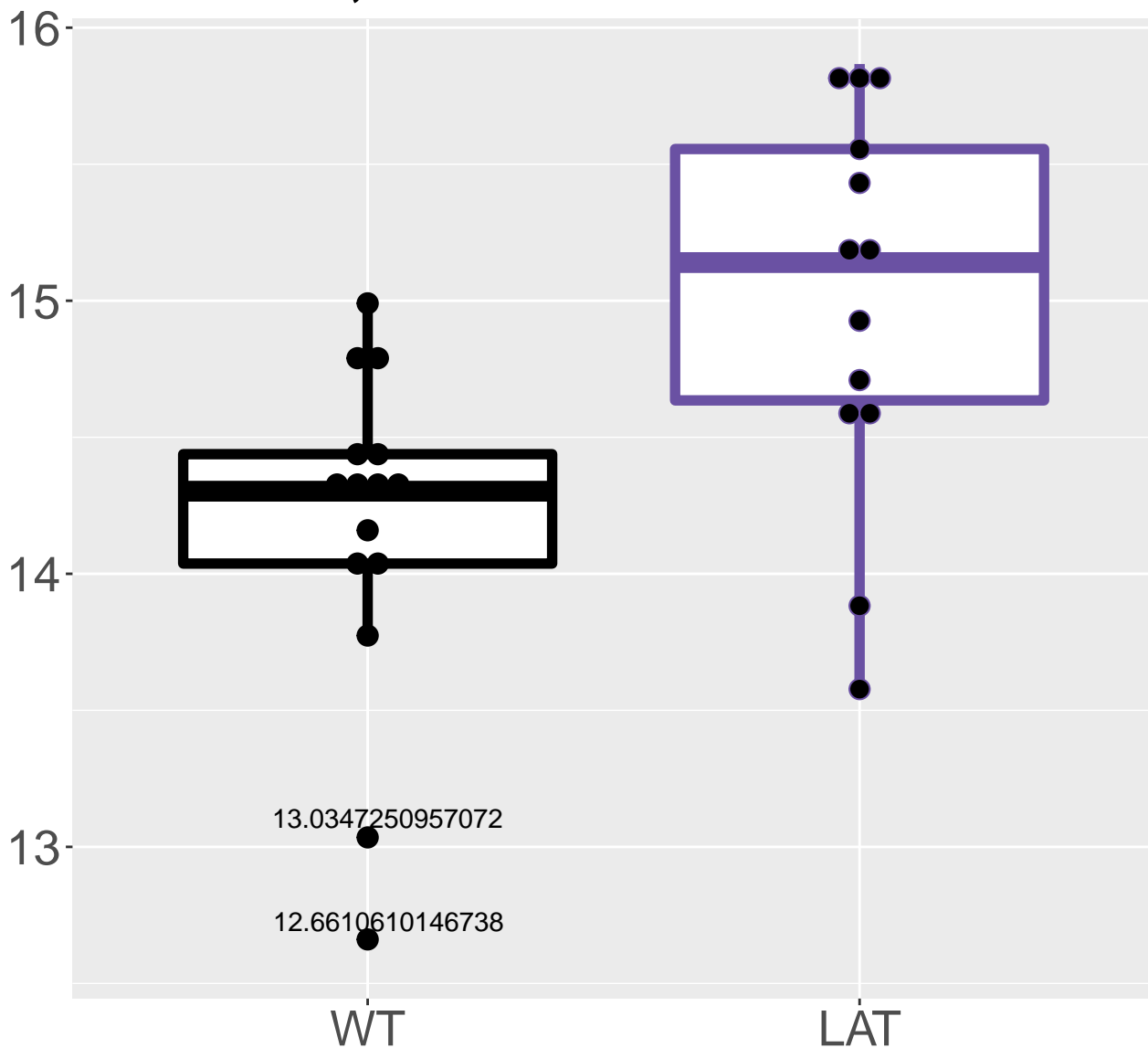
**FDR = 0.011, FC = -0.39**



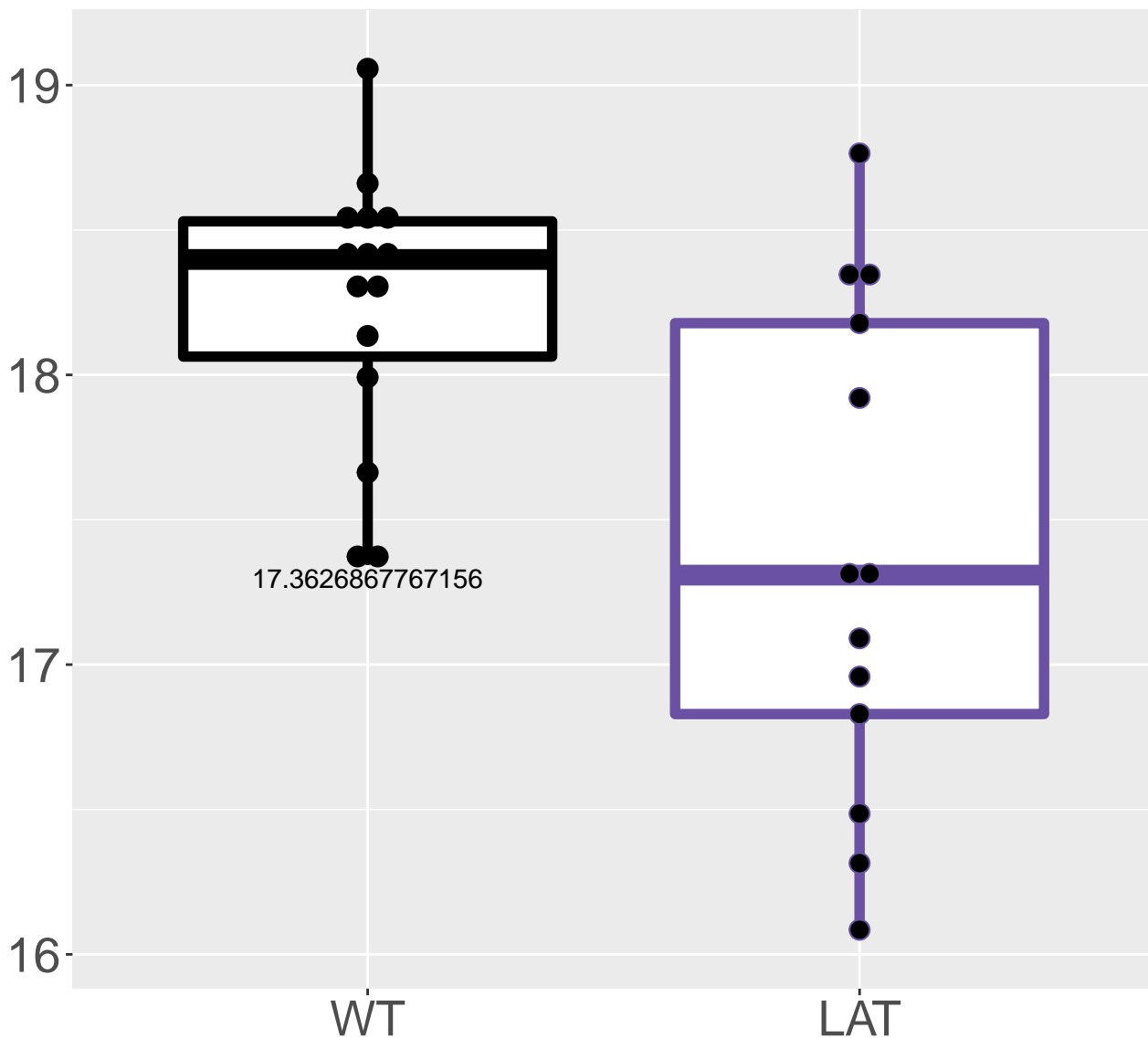


**M683.1659T615.24**

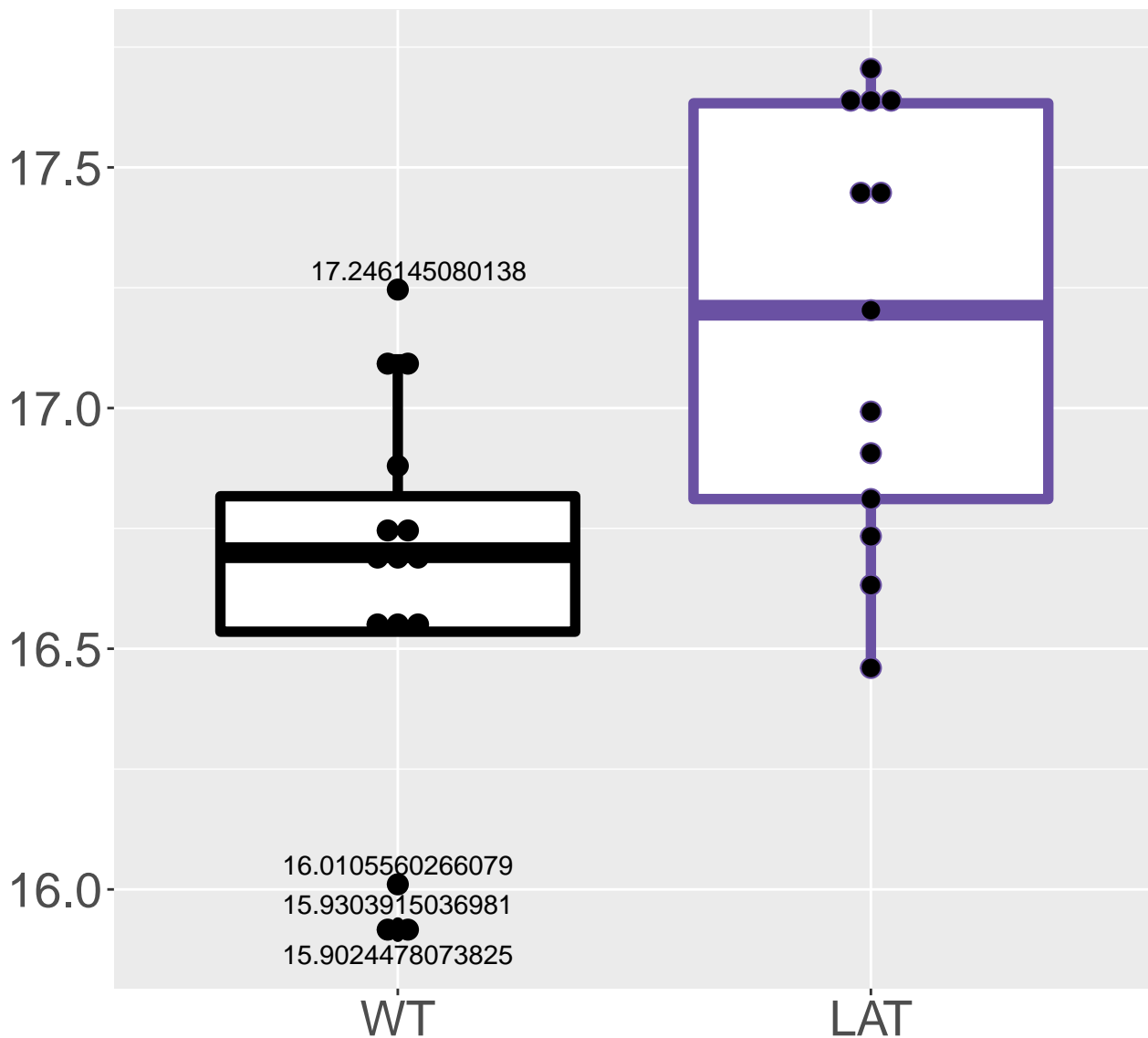
**FDR = 0.011, FC = 0.84**



**FDR = 0.011, FC = -0.87**

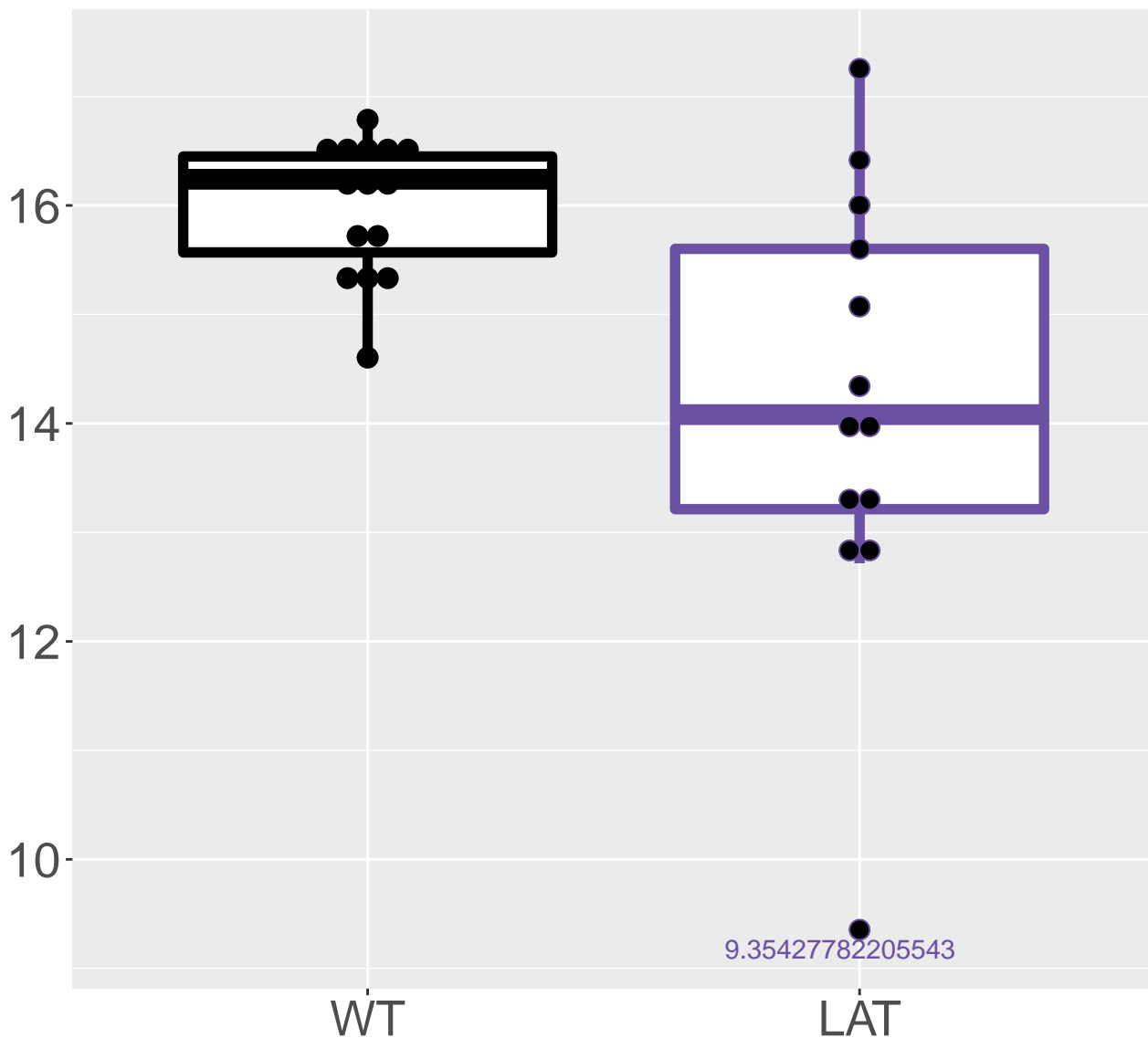


**FDR = 0.011, FC = 0.55**

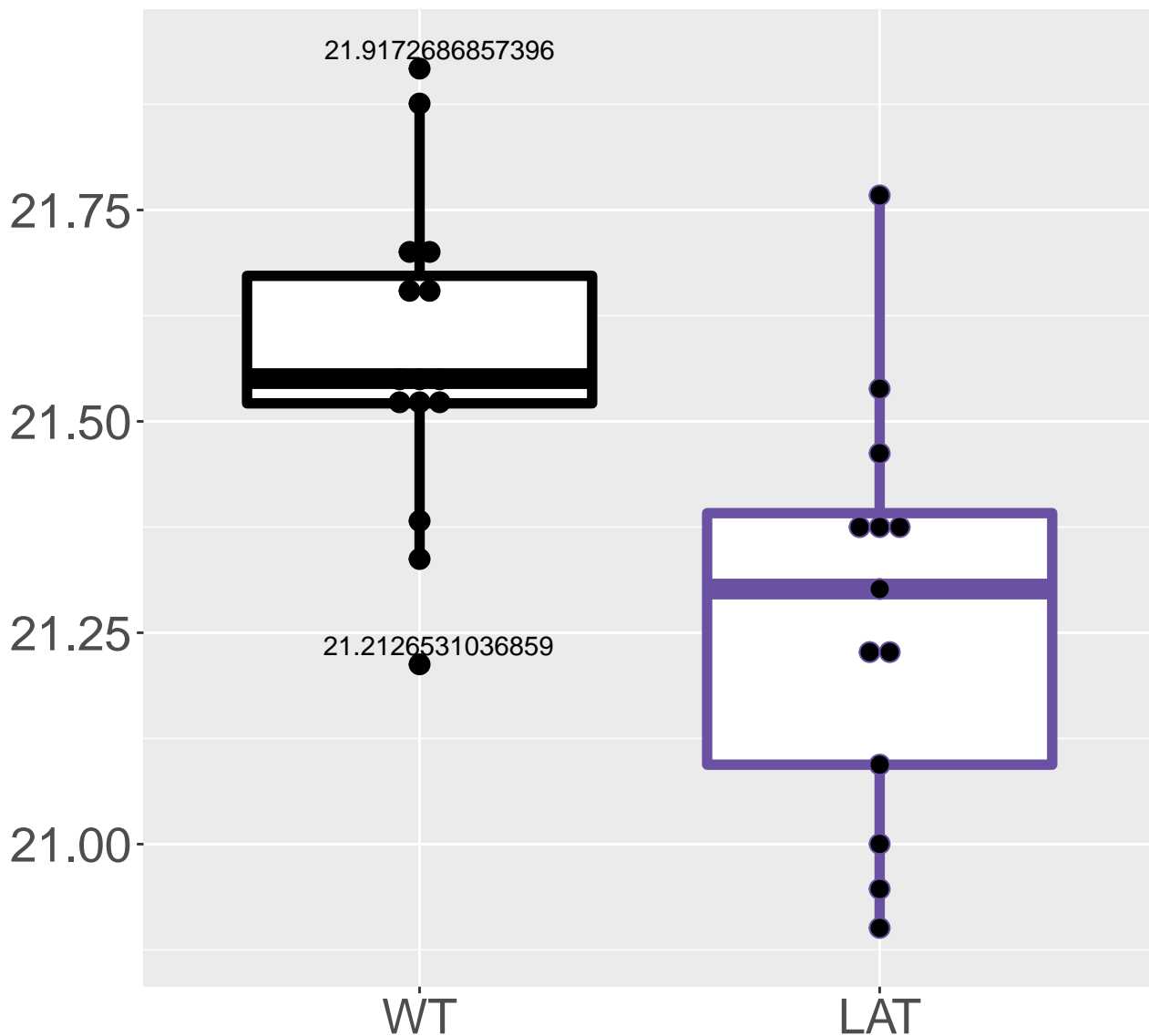


**M816.263T527.44**

**FDR = 0.011, FC = -1.8**

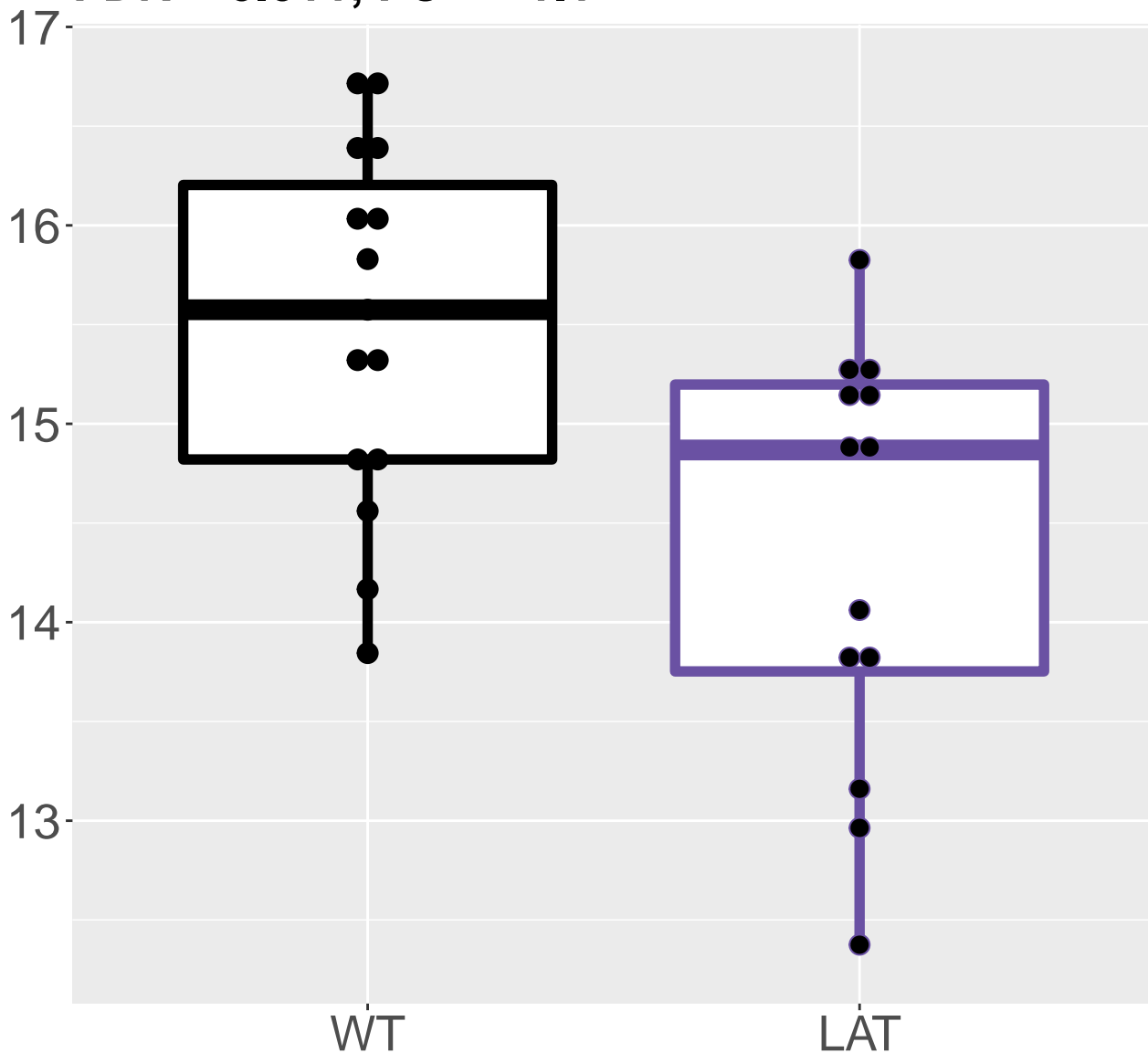


**M279.0772T430.87**  
**FDR = 0.011, FC = -0.3**

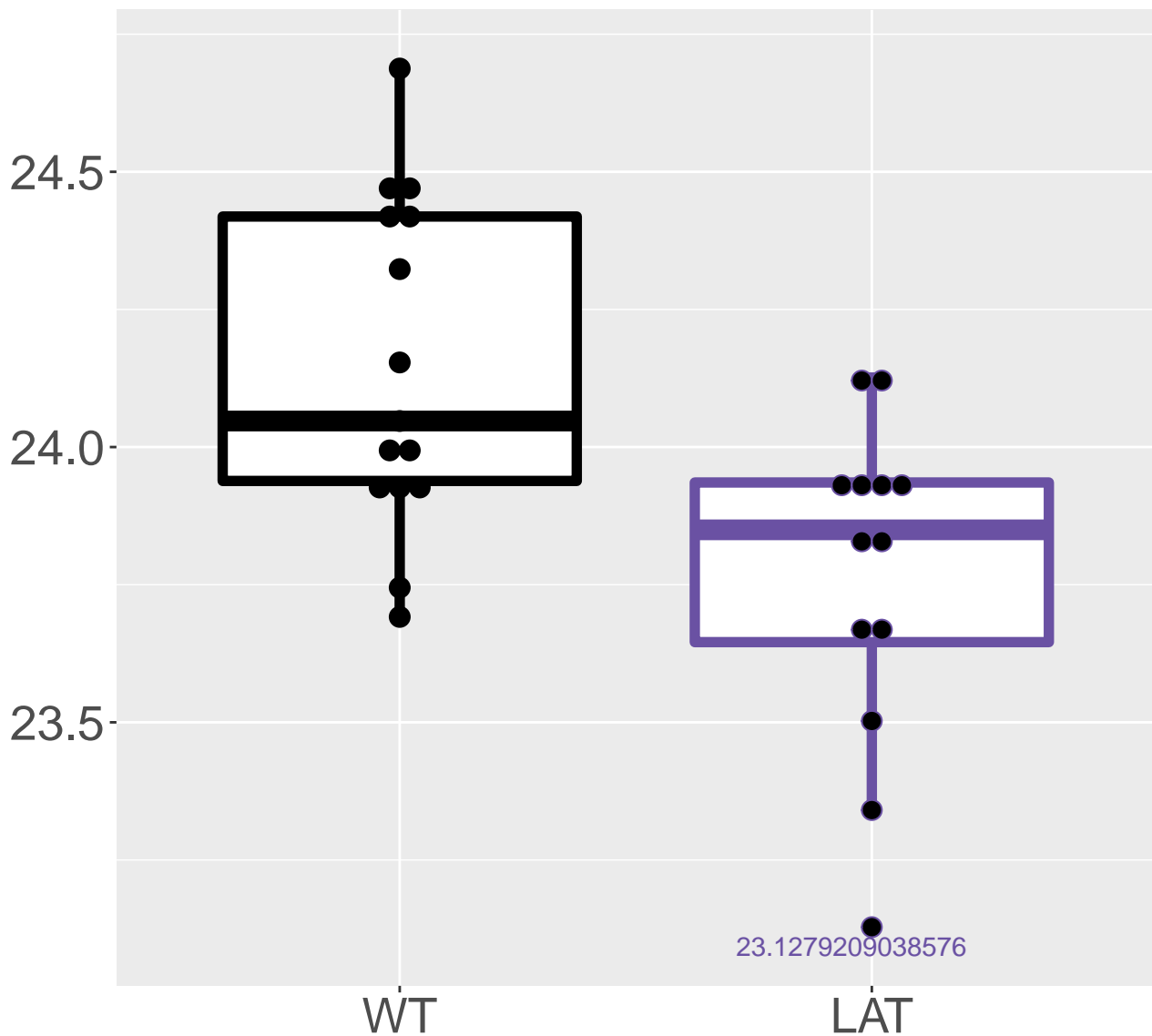


**M459.1364T528.2**

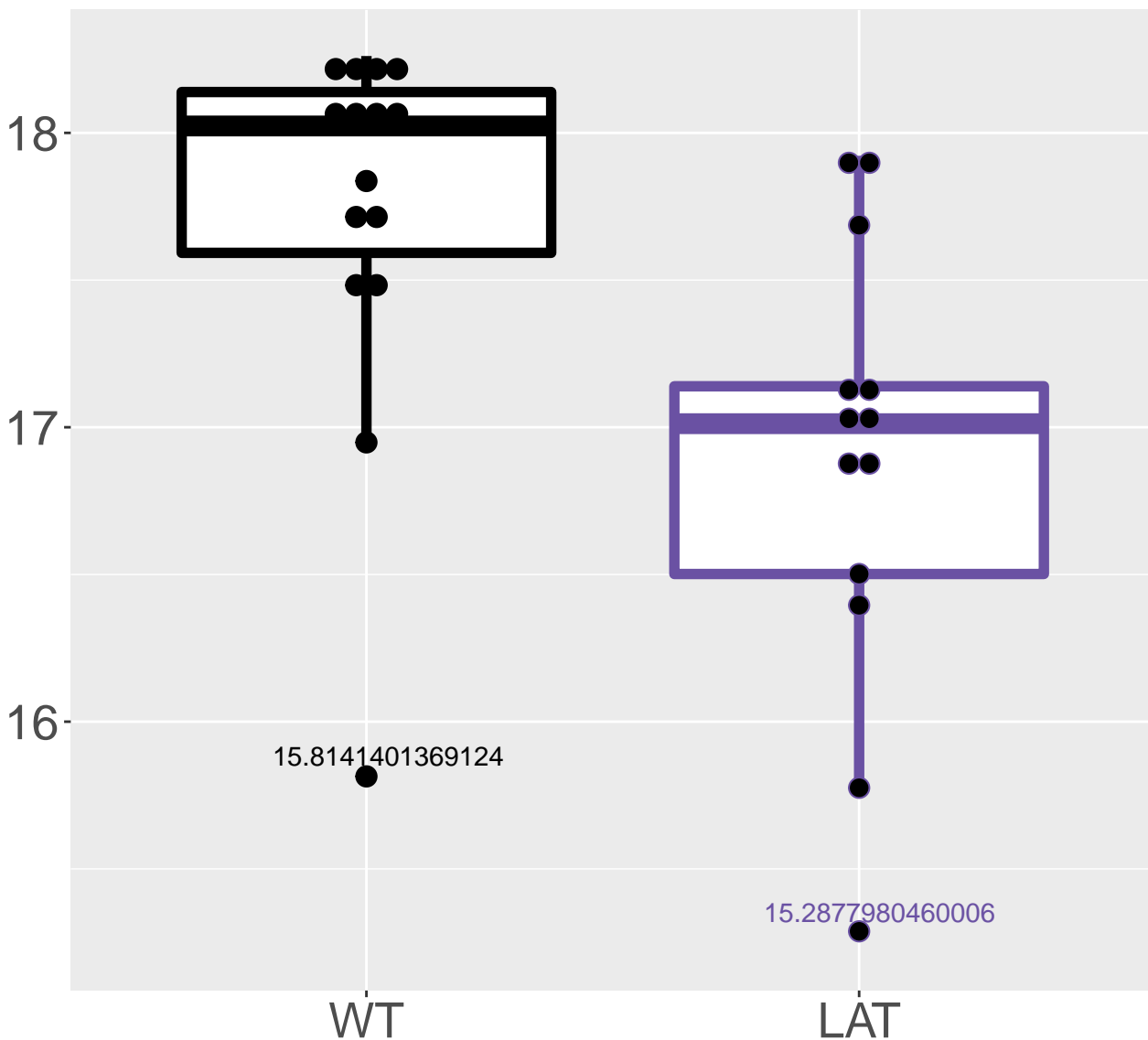
**FDR = 0.011, FC = -1.1**



**cis-8,11,14-Eicosatrienoic acid;8,11,14-Eicos**  
**FDR = 0.011, FC = -0.38**



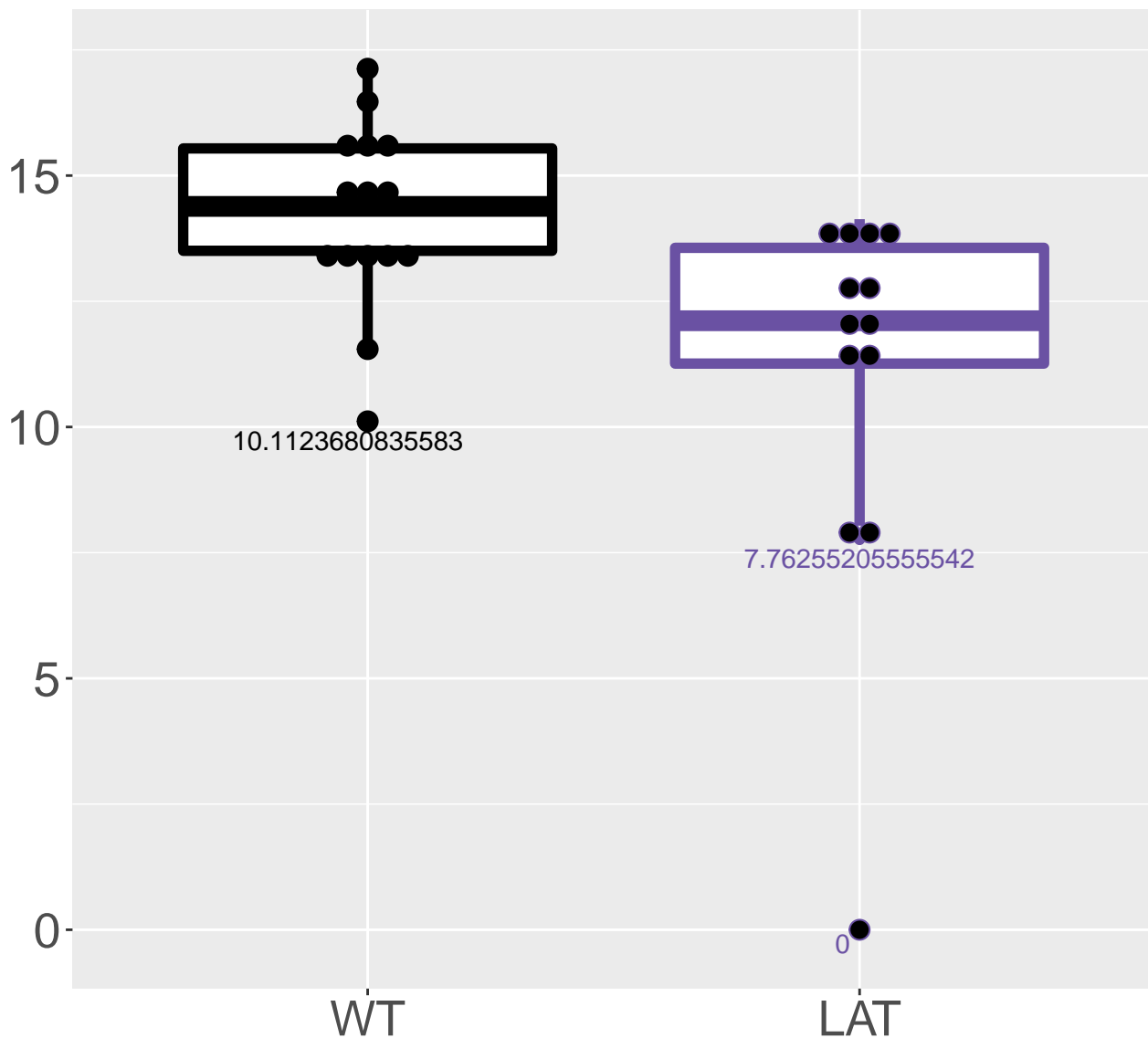
**FDR = 0.012, FC = -0.86**



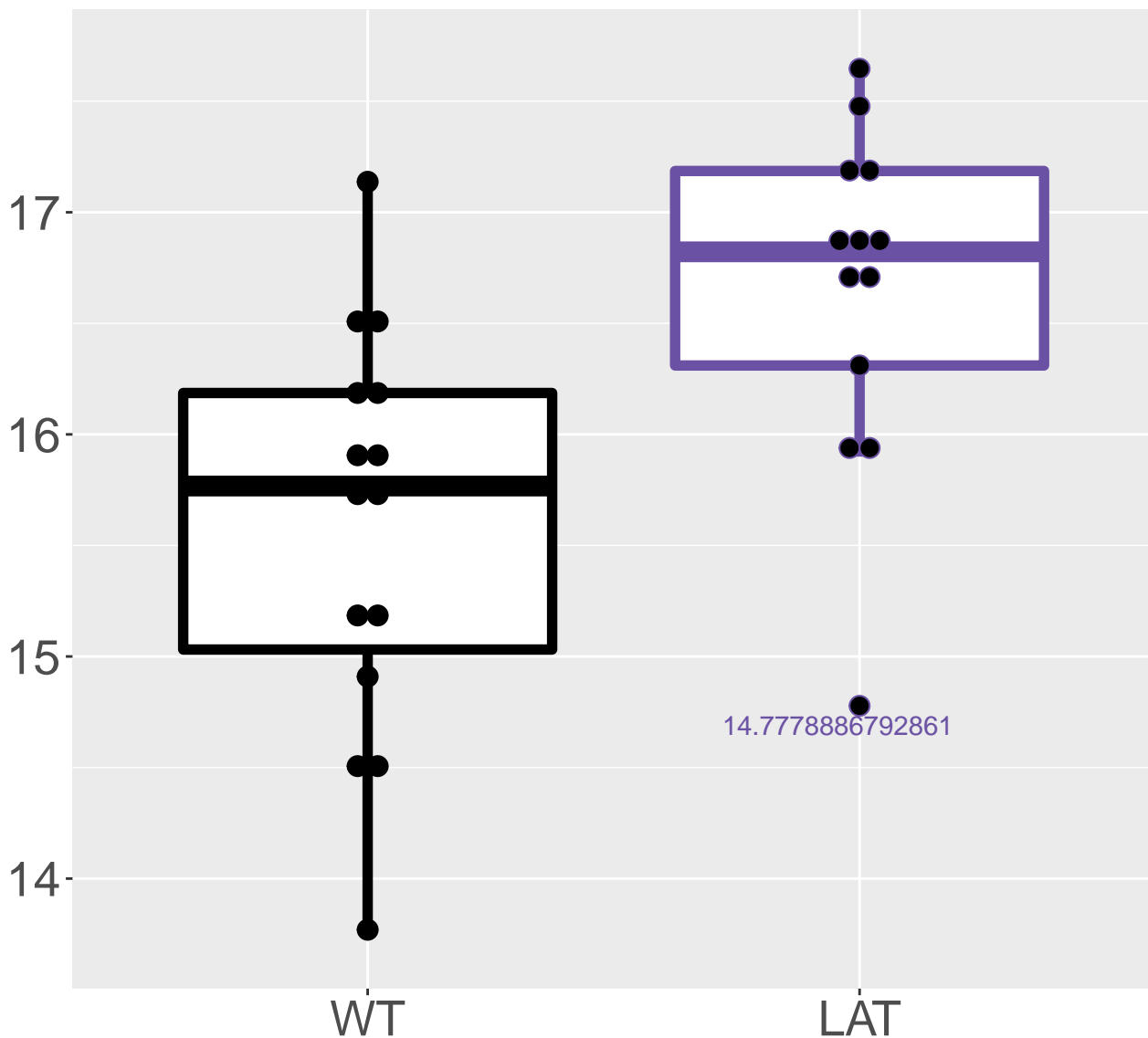


**M383.0771T138.11**

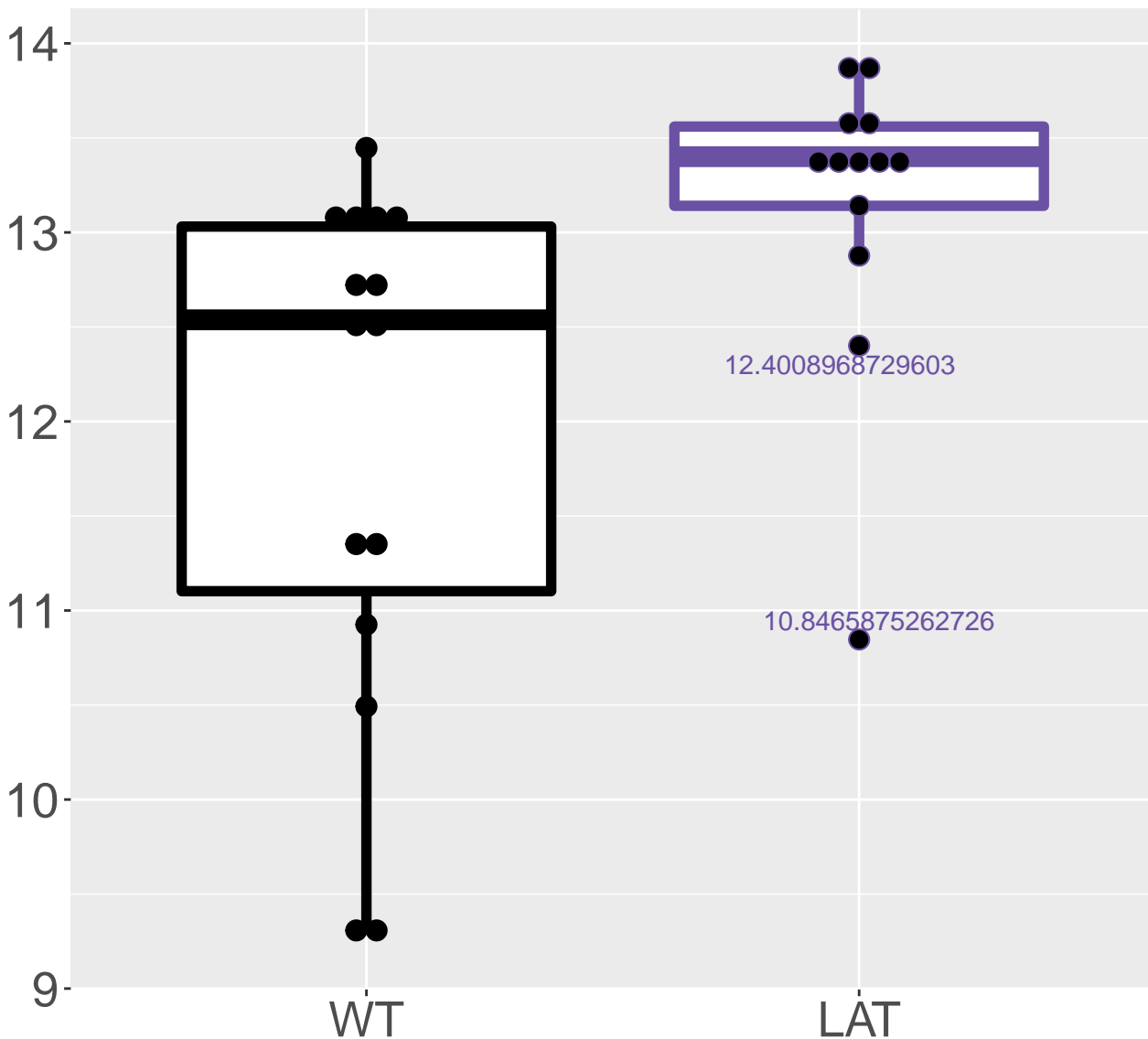
**FDR = 0.012, FC = -3.2, sex\*\***



**M357.0551T589.69\_2**  
**FDR = 0.012, FC = 1.1**

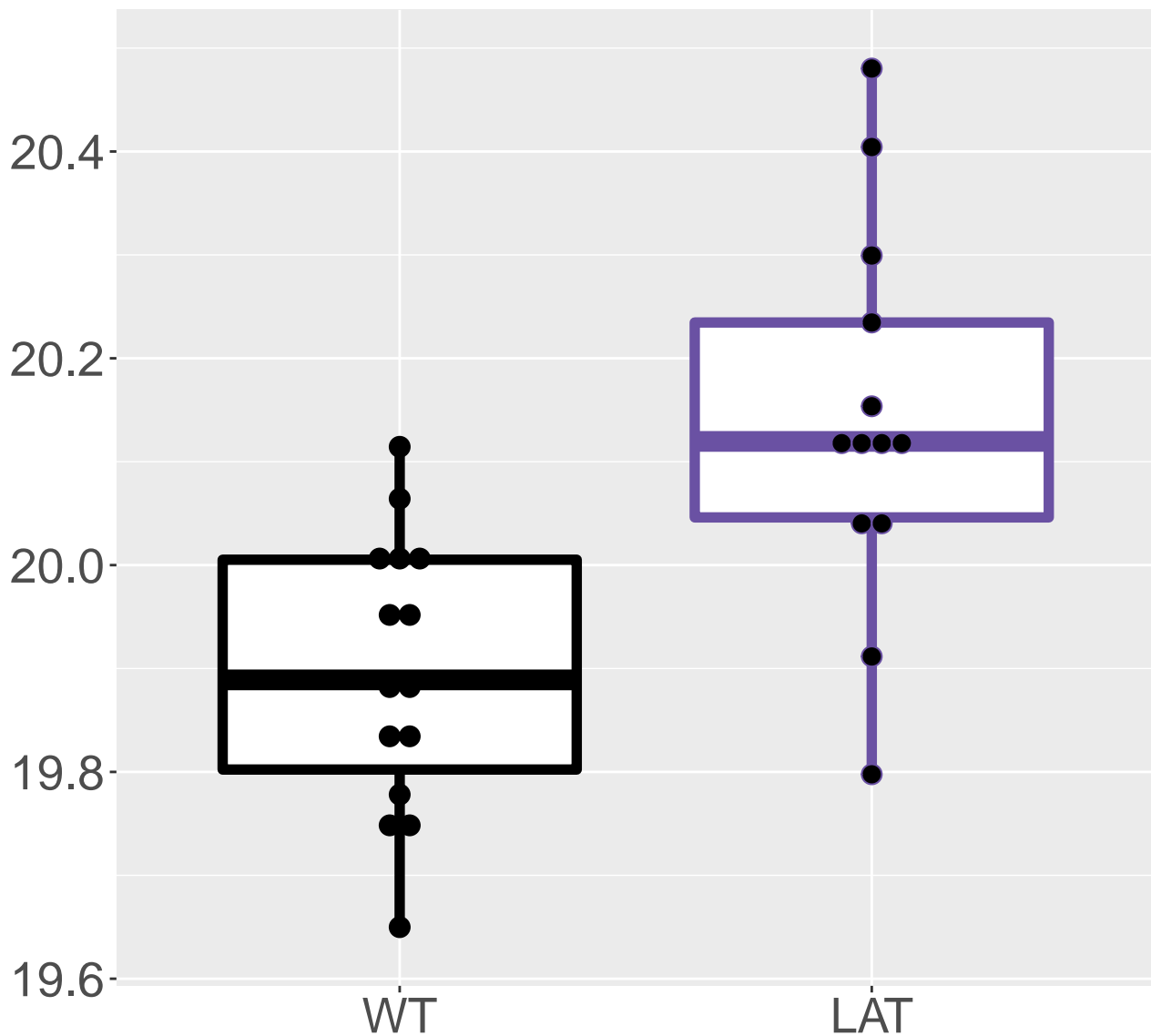


**M727.1566T645.08**  
**FDR = 0.012, FC = 1.2**



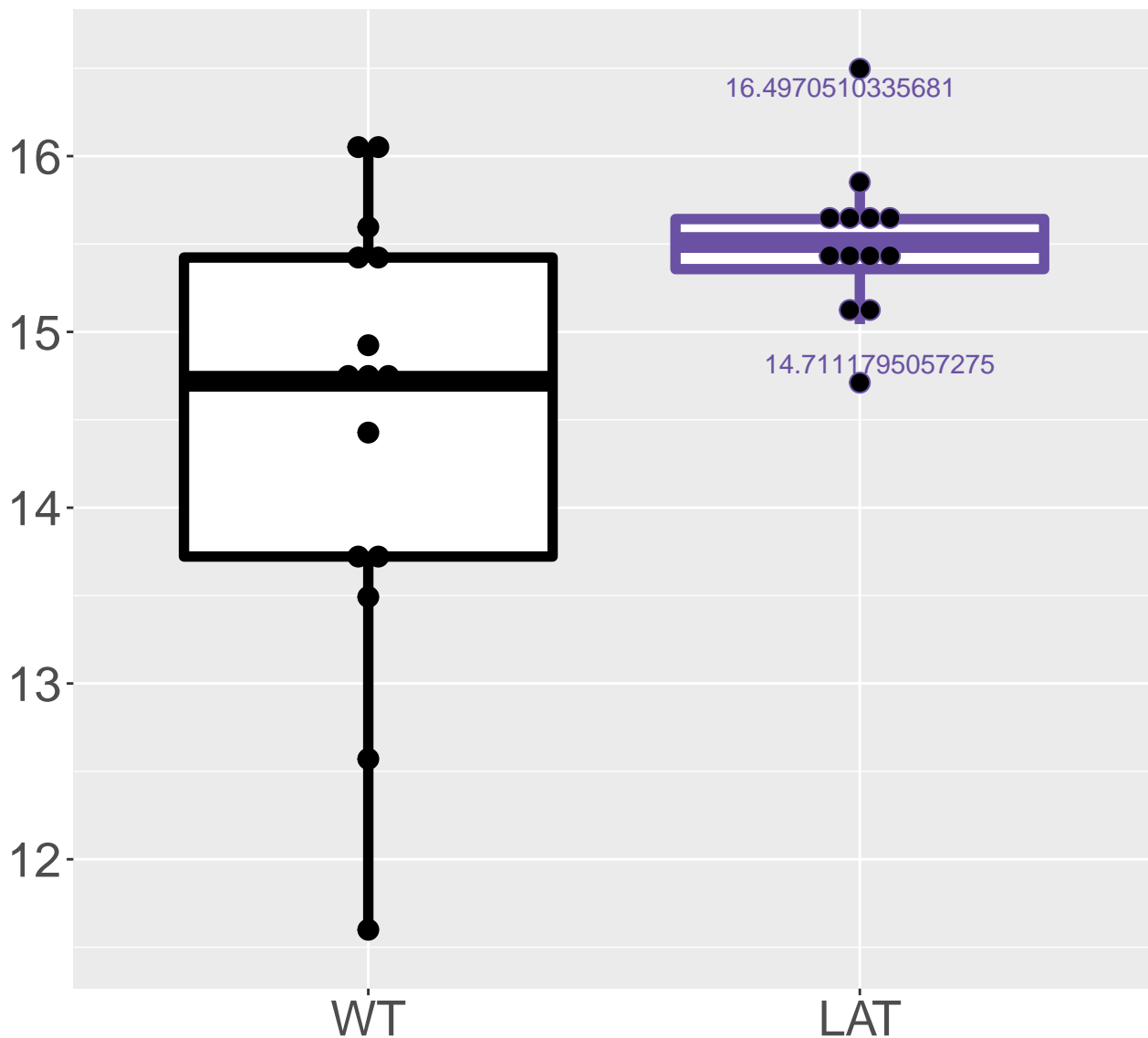
**M140.9194T350.46**

**FDR = 0.012, FC = 0.24**



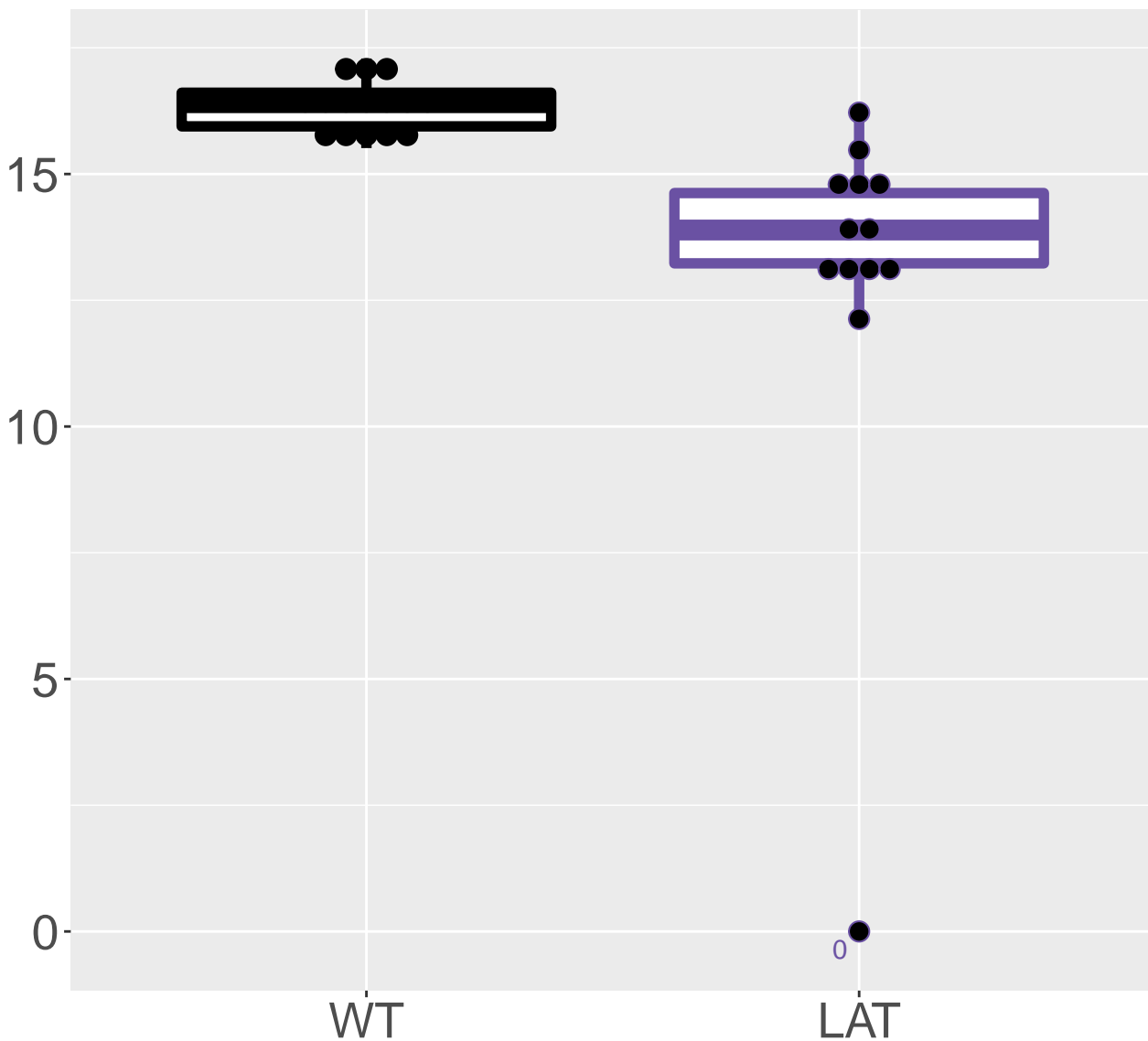
# Argininosuccinic acid

FDR = 0.012, FC = 1

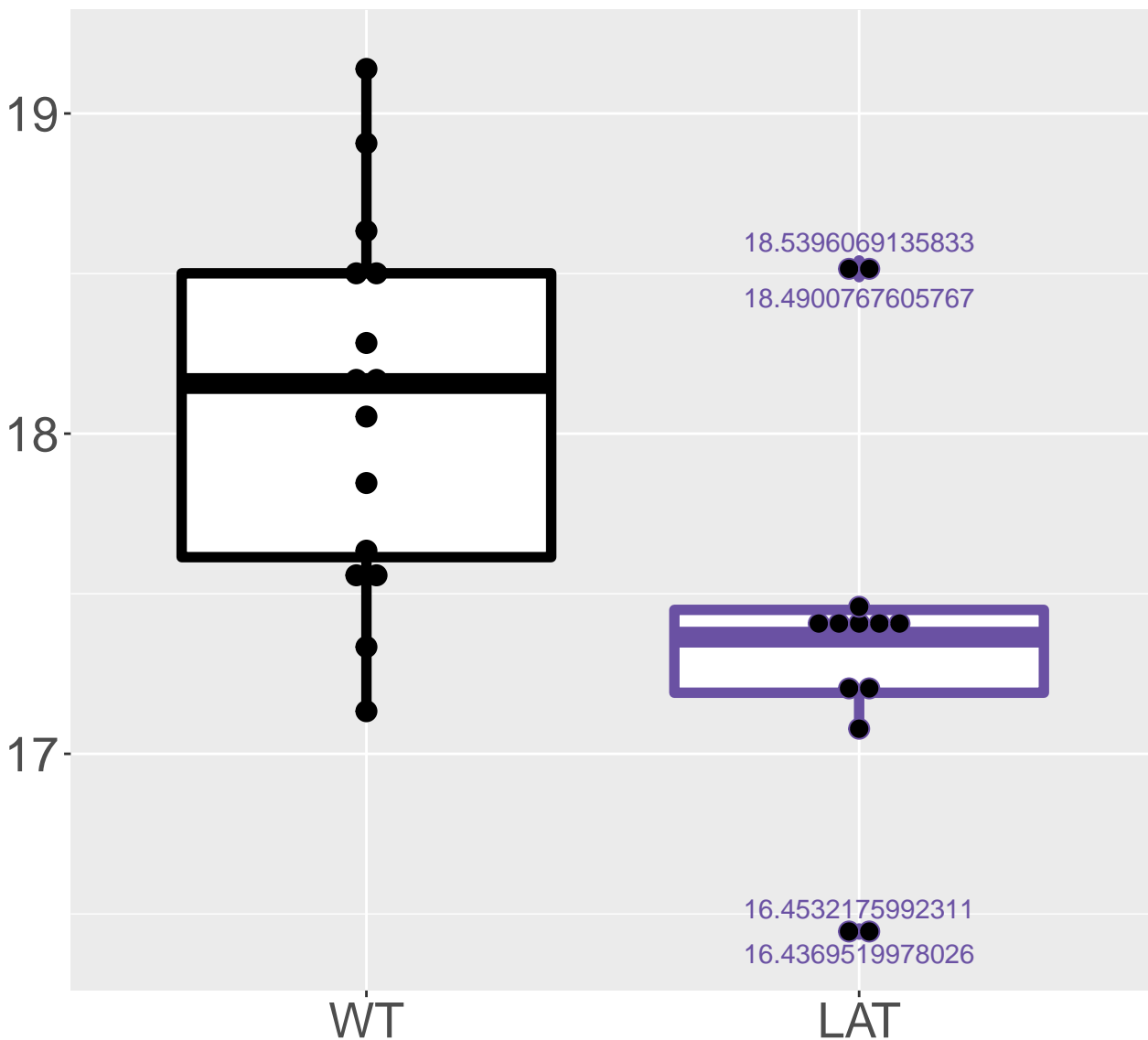


**M796.1092T555.94**

**FDR = 0.012, FC = -3.4**

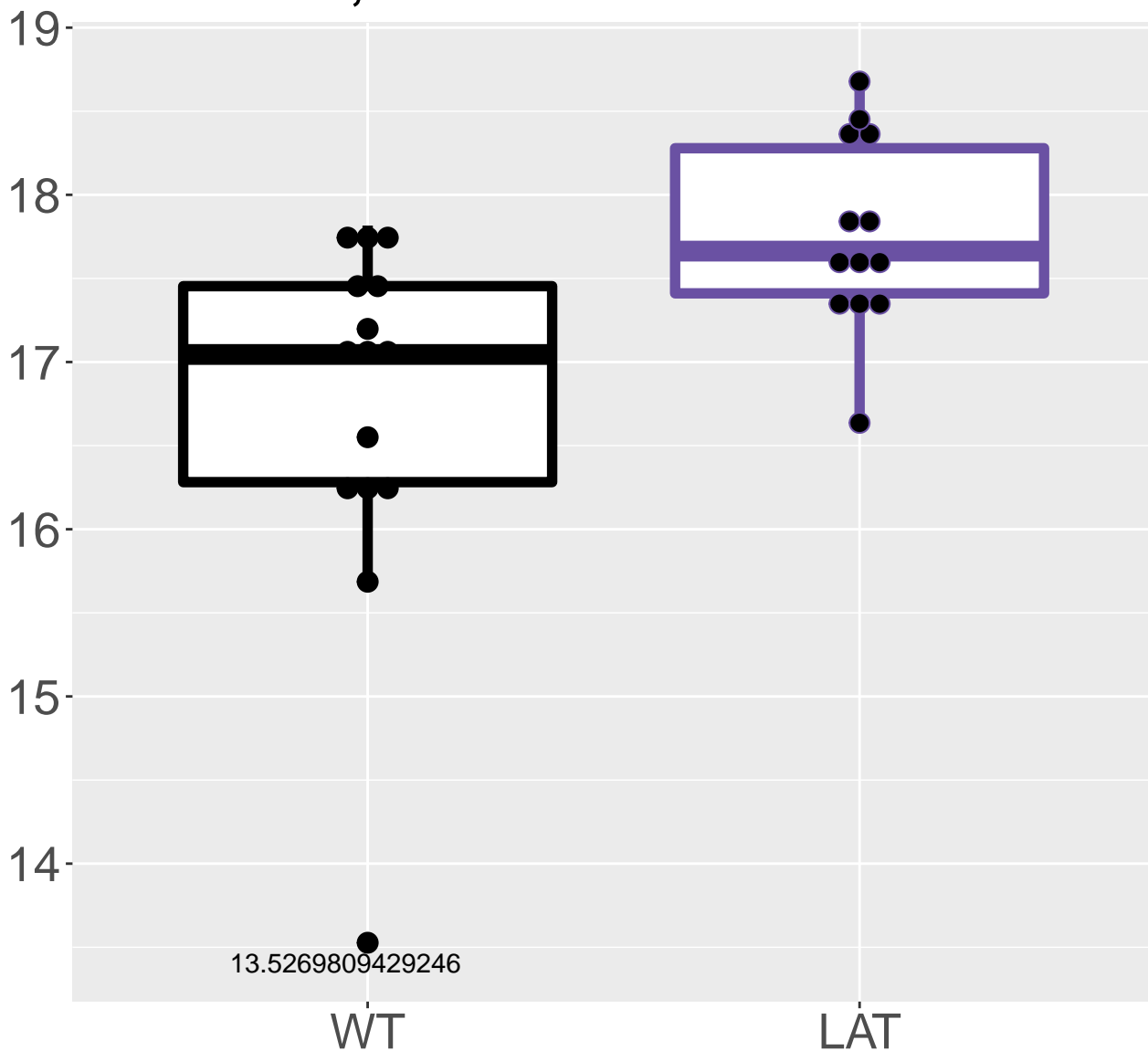


**FDR = 0.012, FC = -0.72**



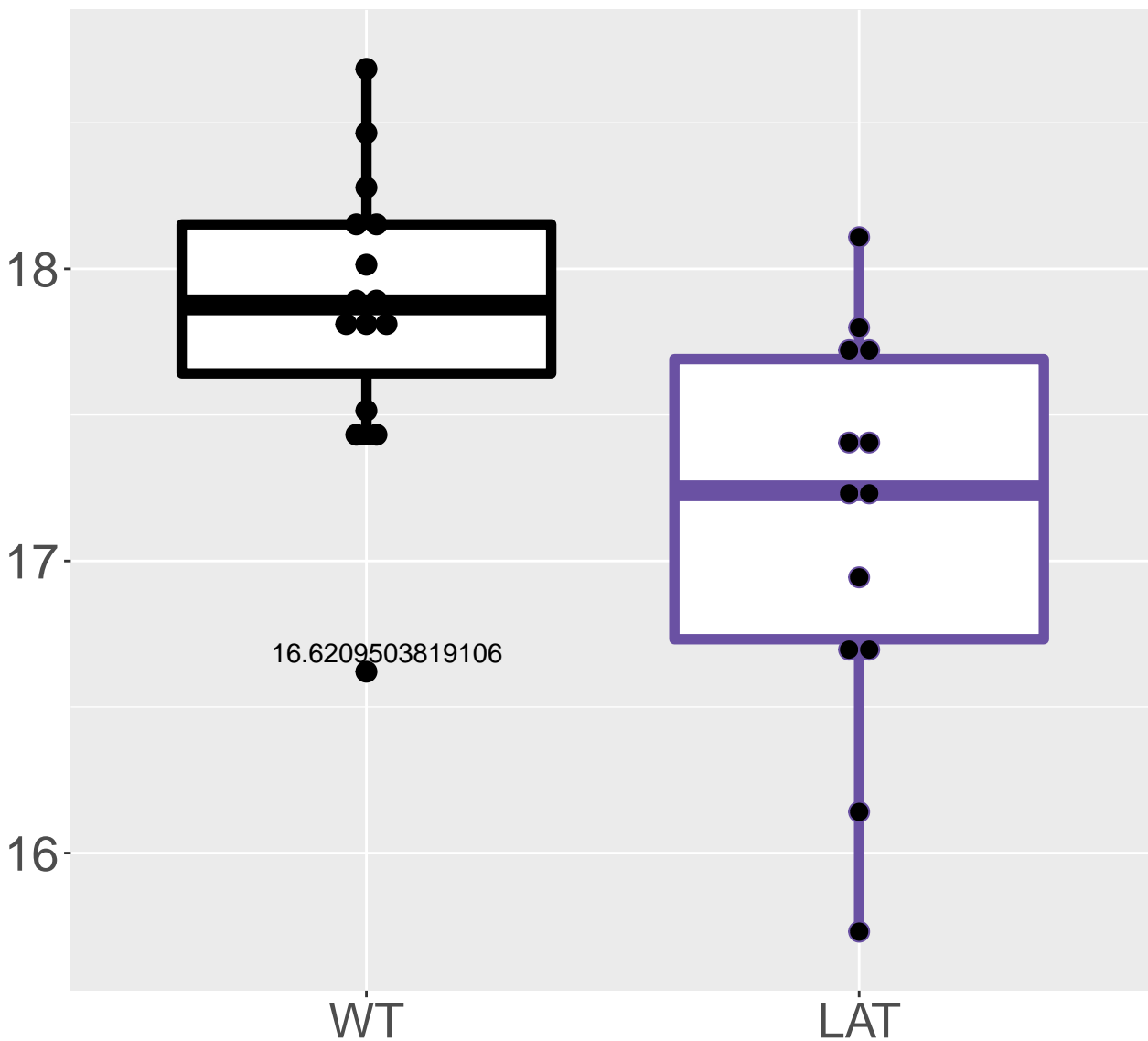
**M276.5582T604.14\_1**

**FDR = 0.012, FC = 1**



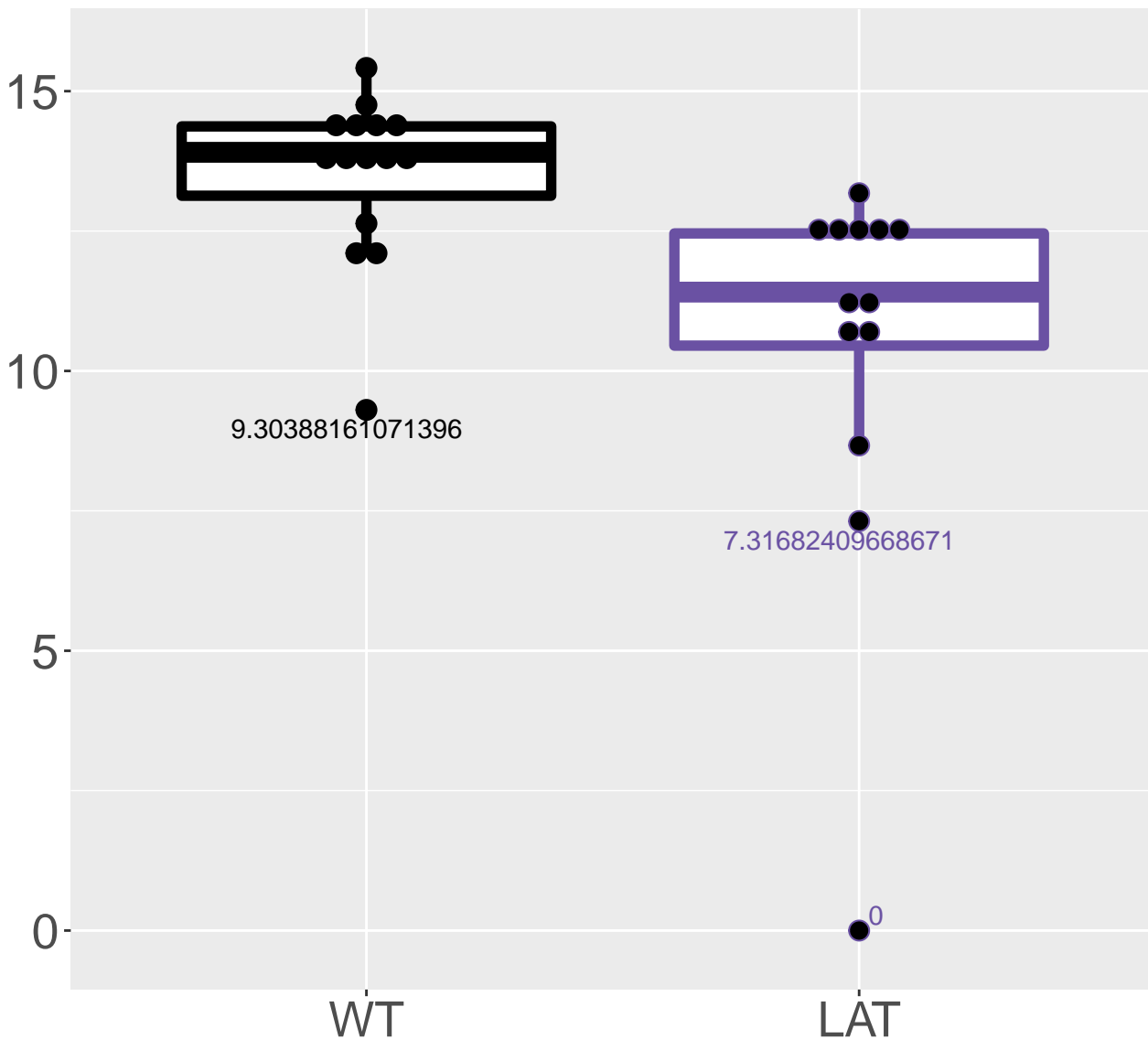


**FDR = 0.012, FC = -0.72**



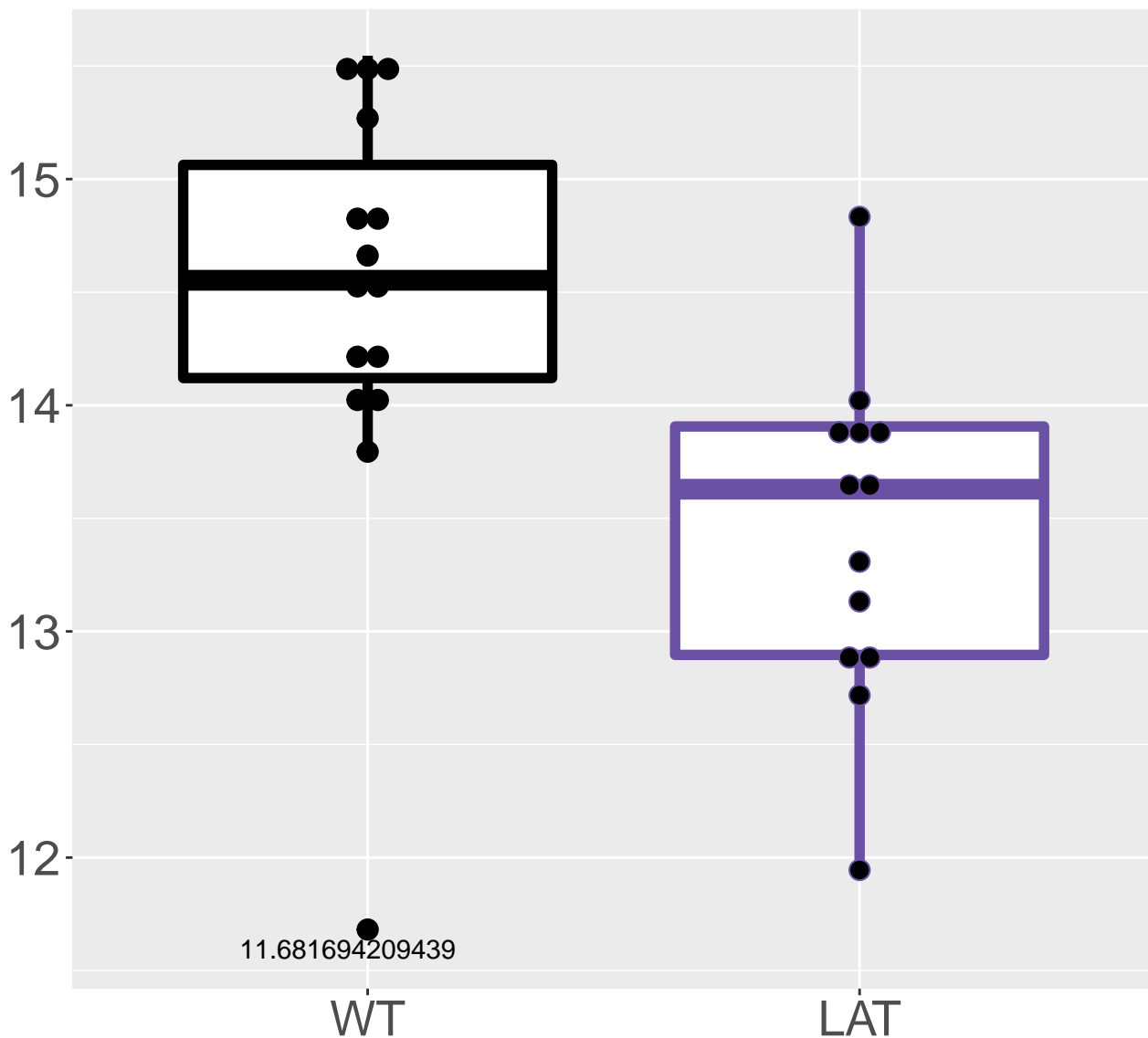
**M445.1945T164.63**

**FDR = 0.012, FC = -3.1**

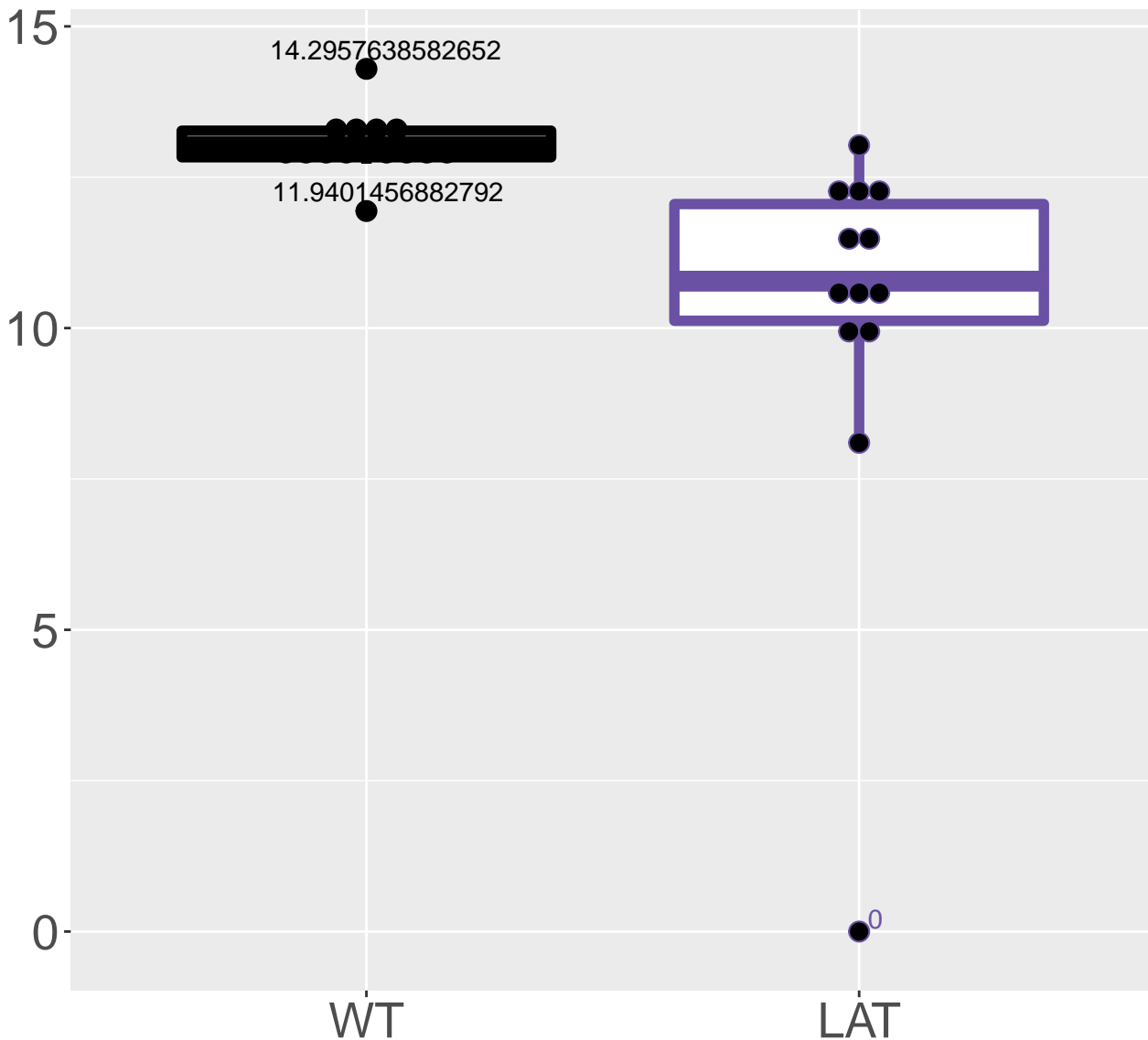


**M318.118T325.14**

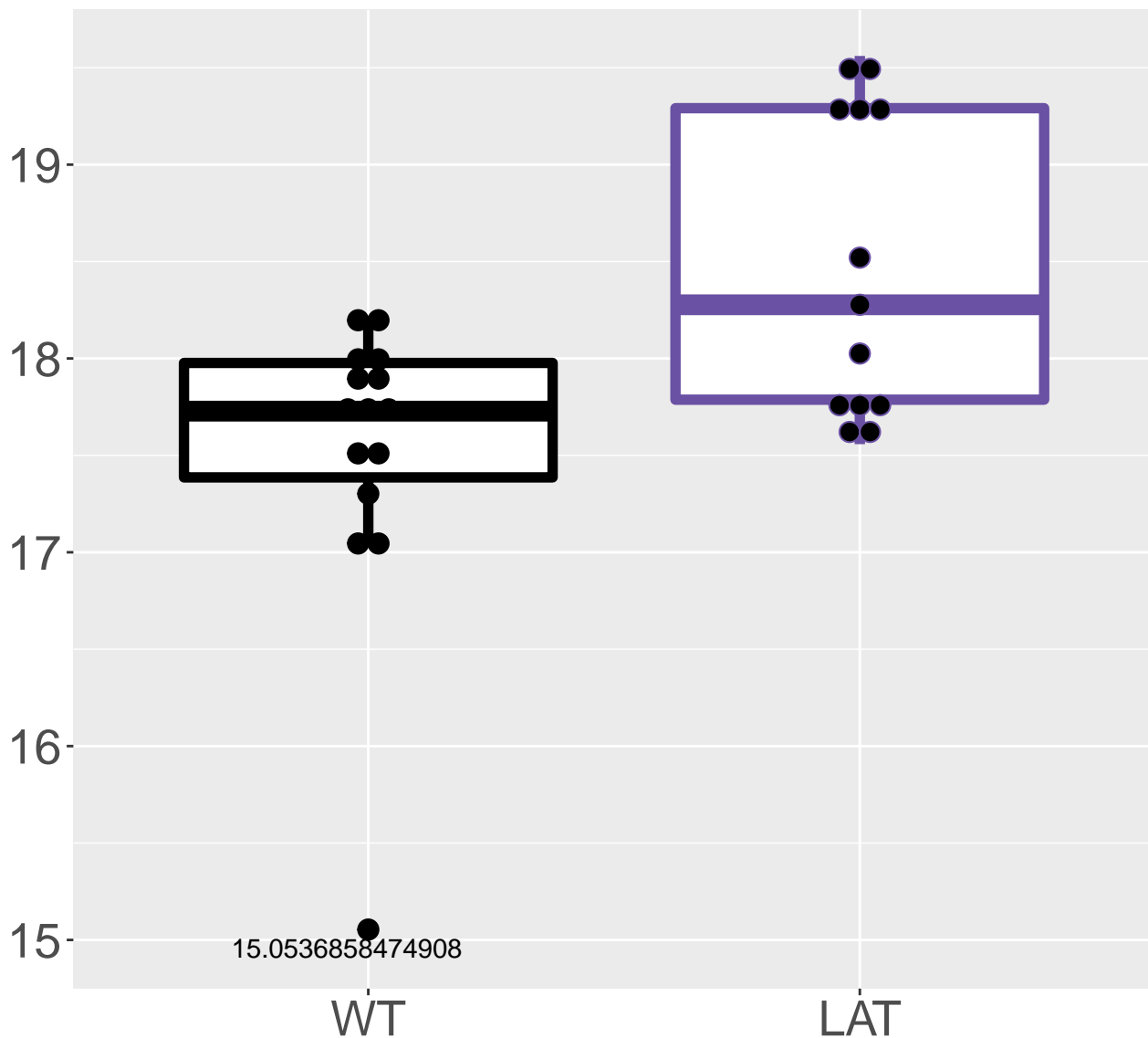
**FDR = 0.013, FC = -1**



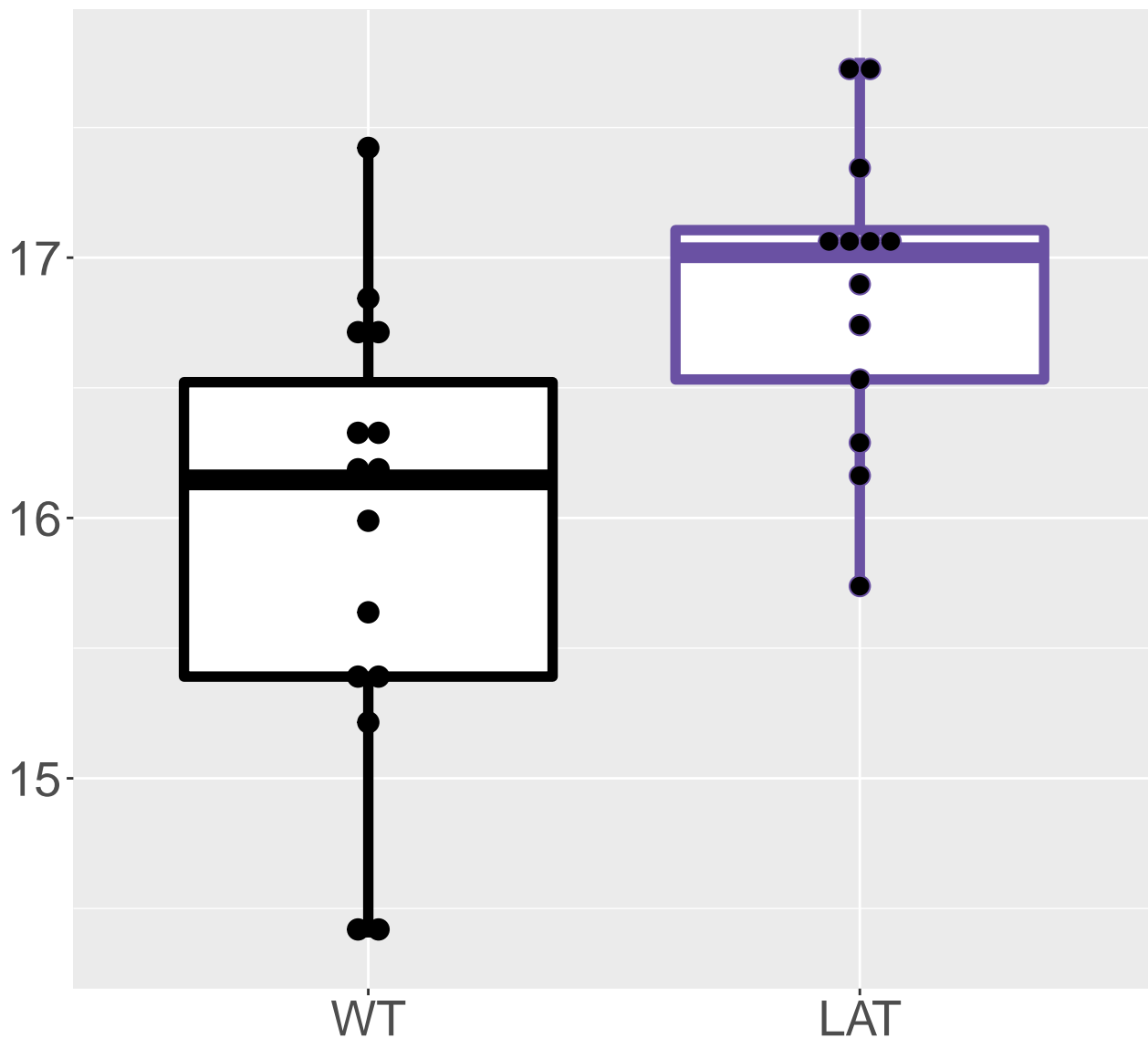
**FDR = 0.013, FC = -2.8**



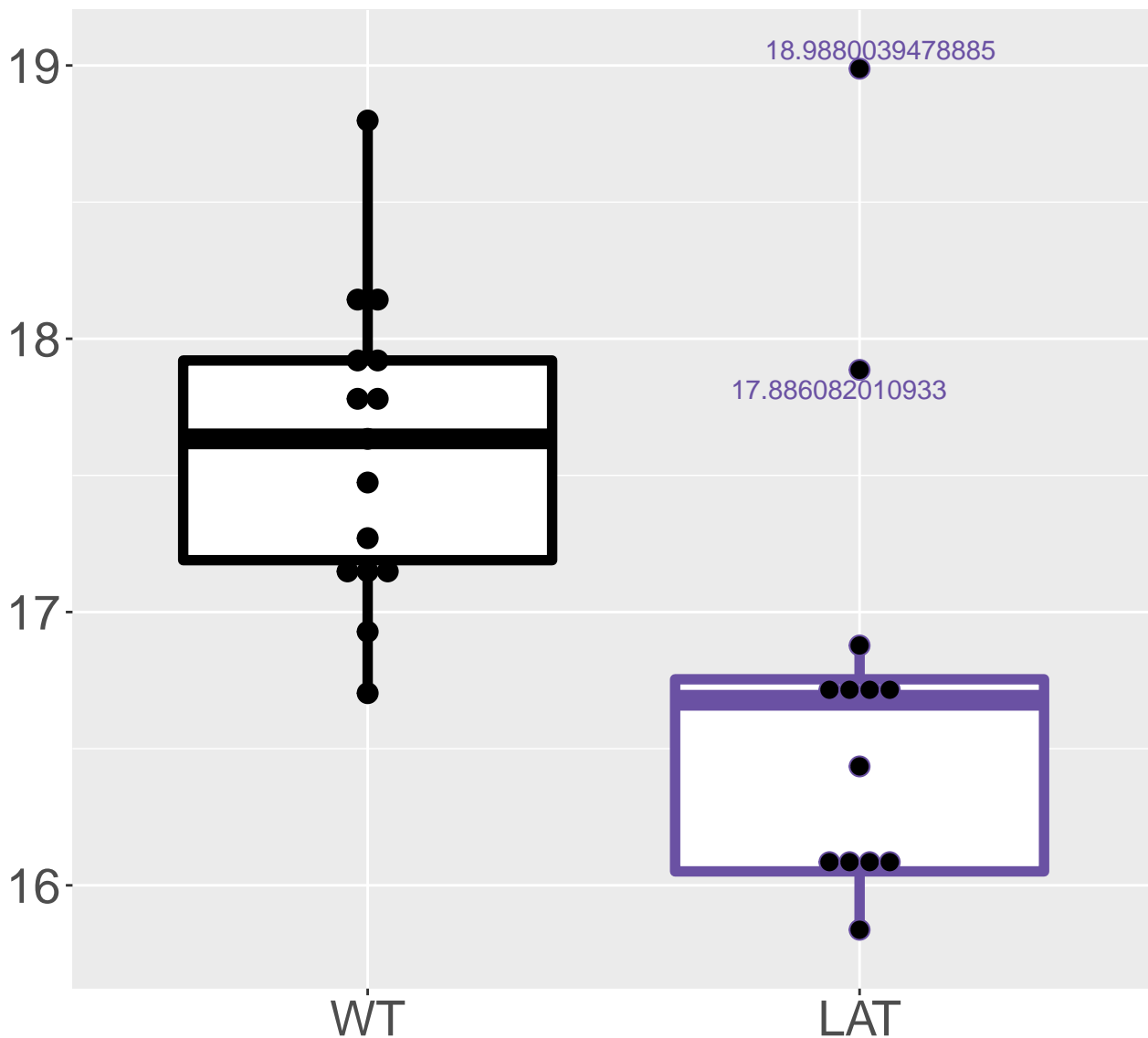
**M419.0916T390.83**  
**FDR = 0.013, FC = 0.96**



**M787.671T587.21\_1**  
**FDR = 0.013, FC = 0.93**

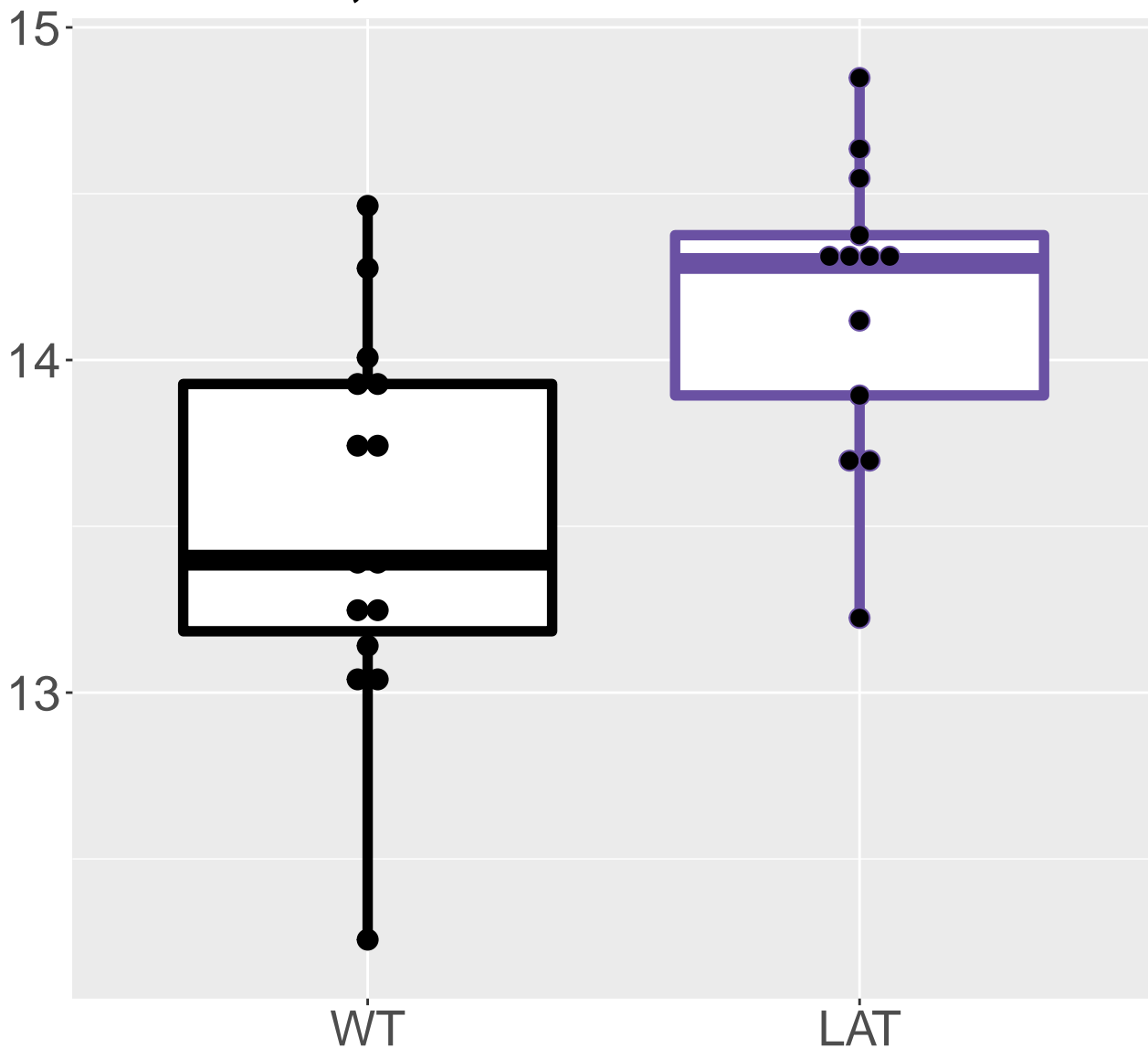


**M980.3139T688.71**  
**FDR = 0.013, FC = -0.89**



**M233.0305T634.34**

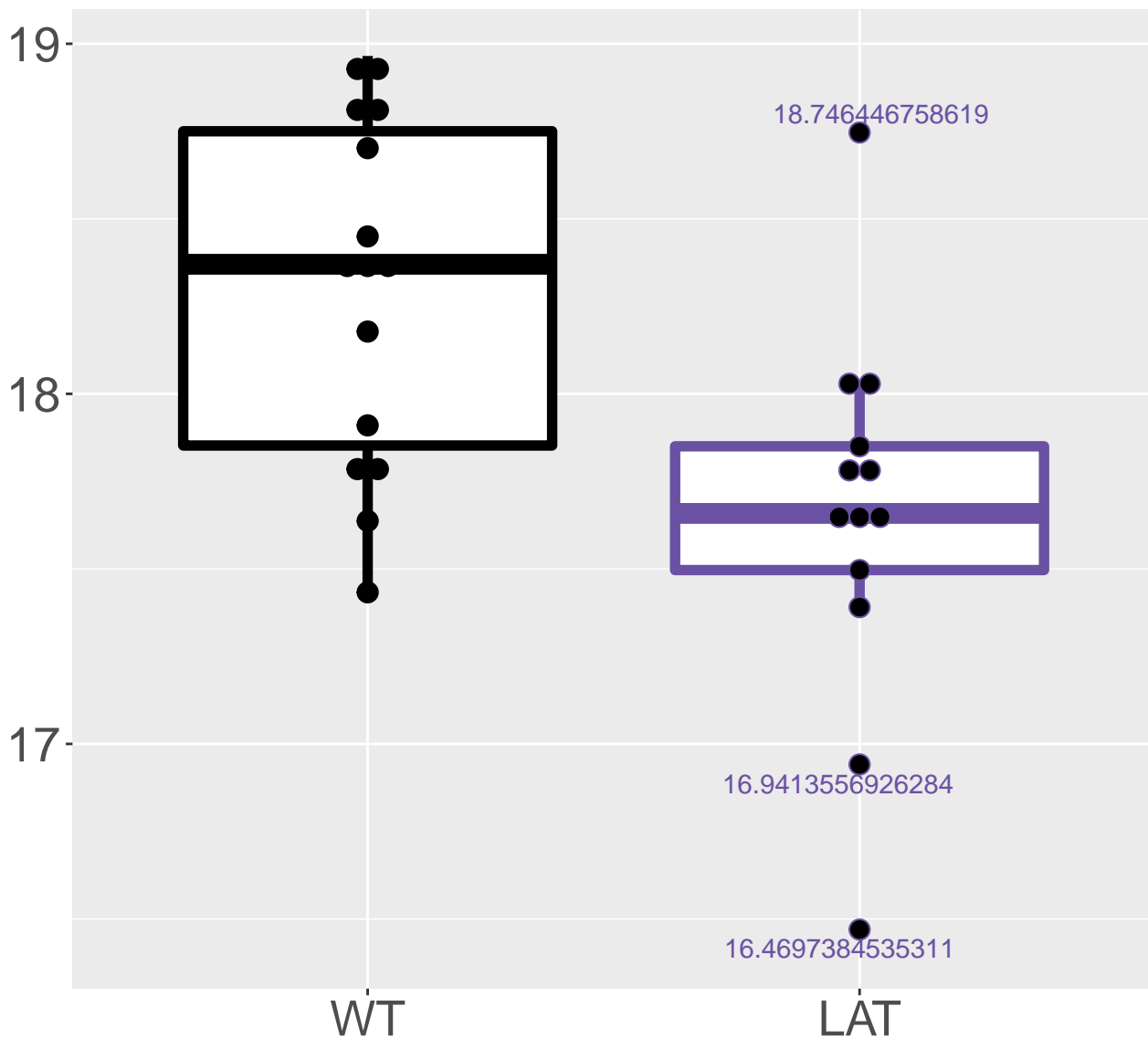
**FDR = 0.013, FC = 0.65**



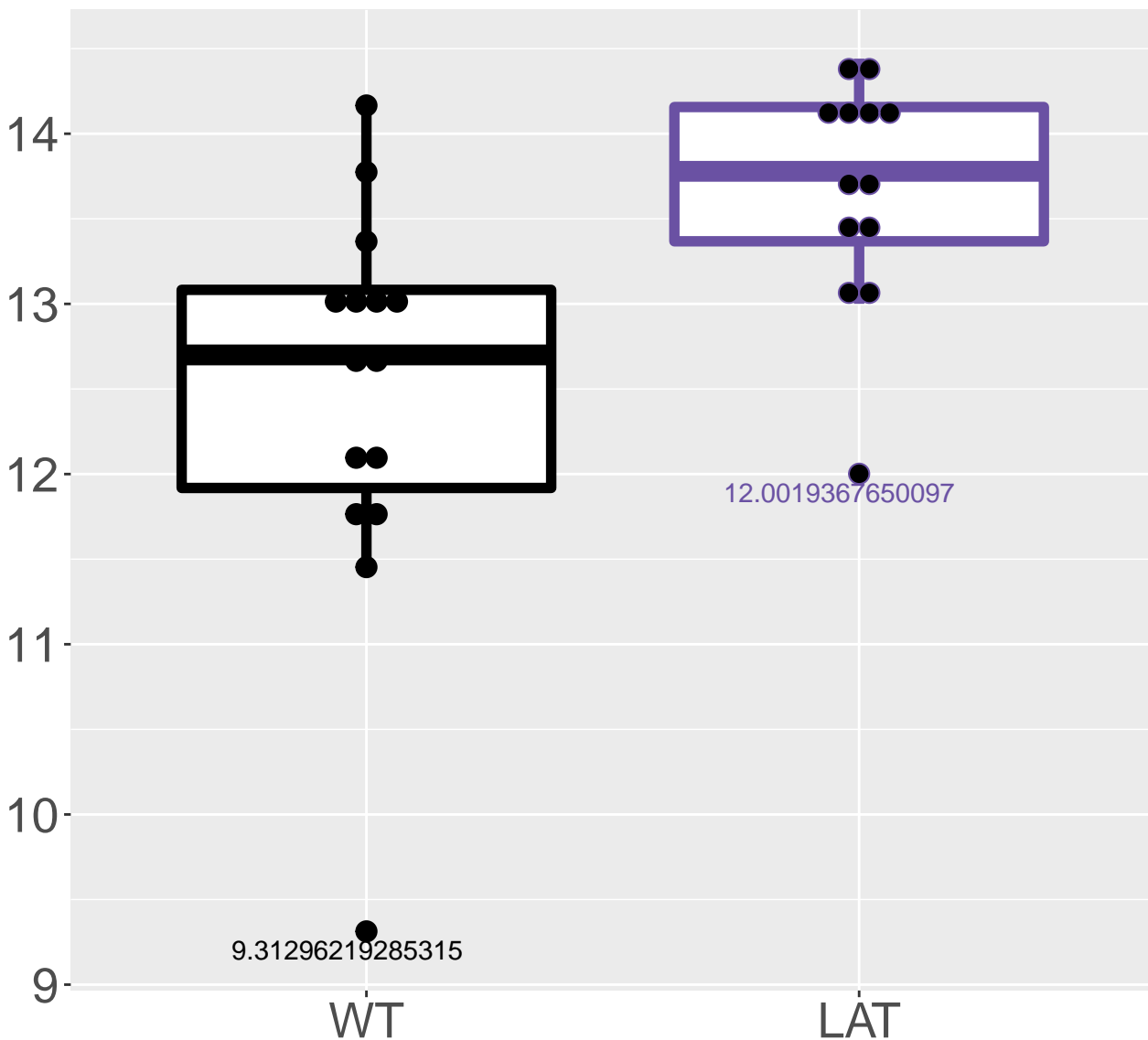


**M629.1754T621.22**

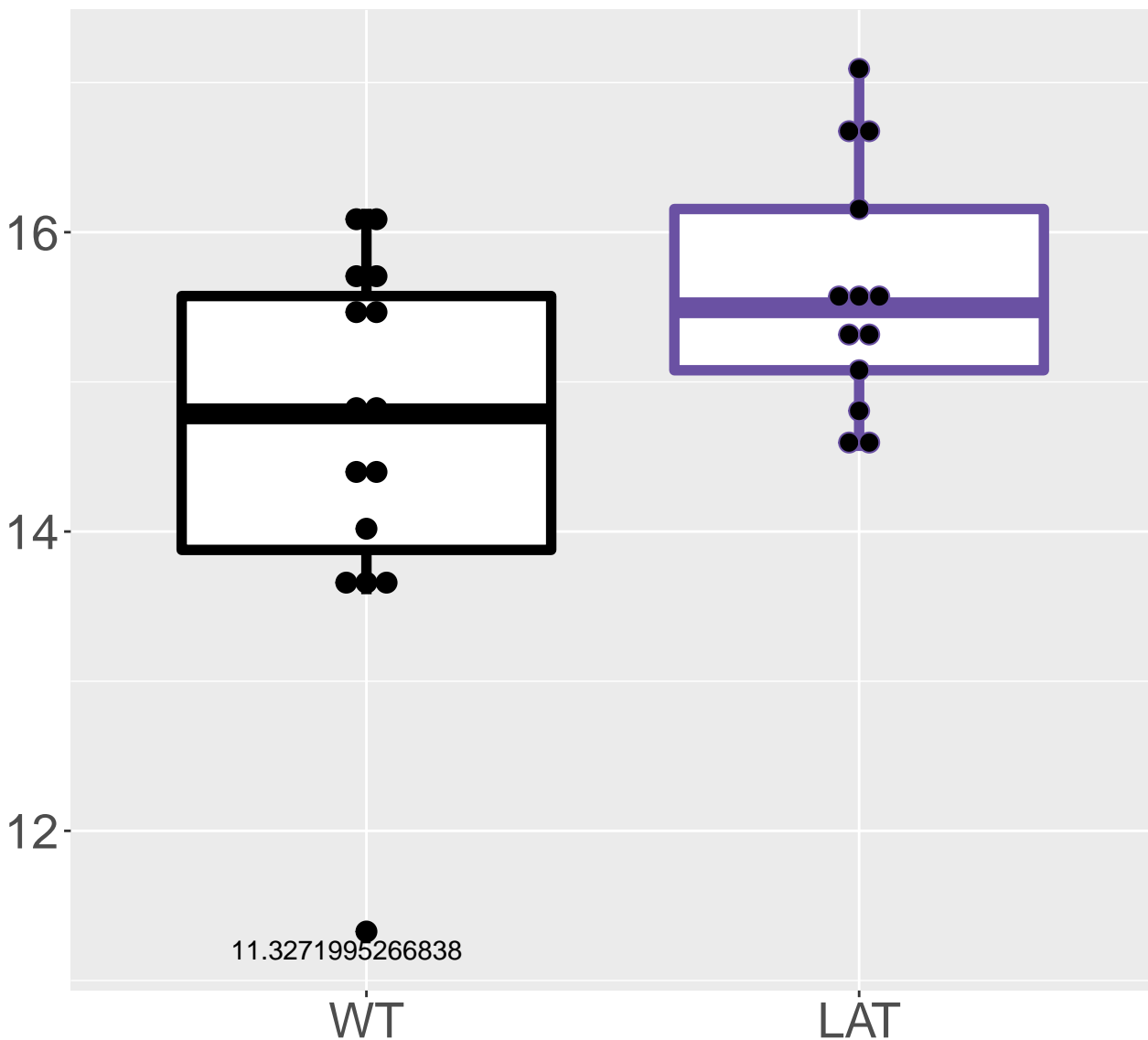
**FDR = 0.013, FC = -0.65**



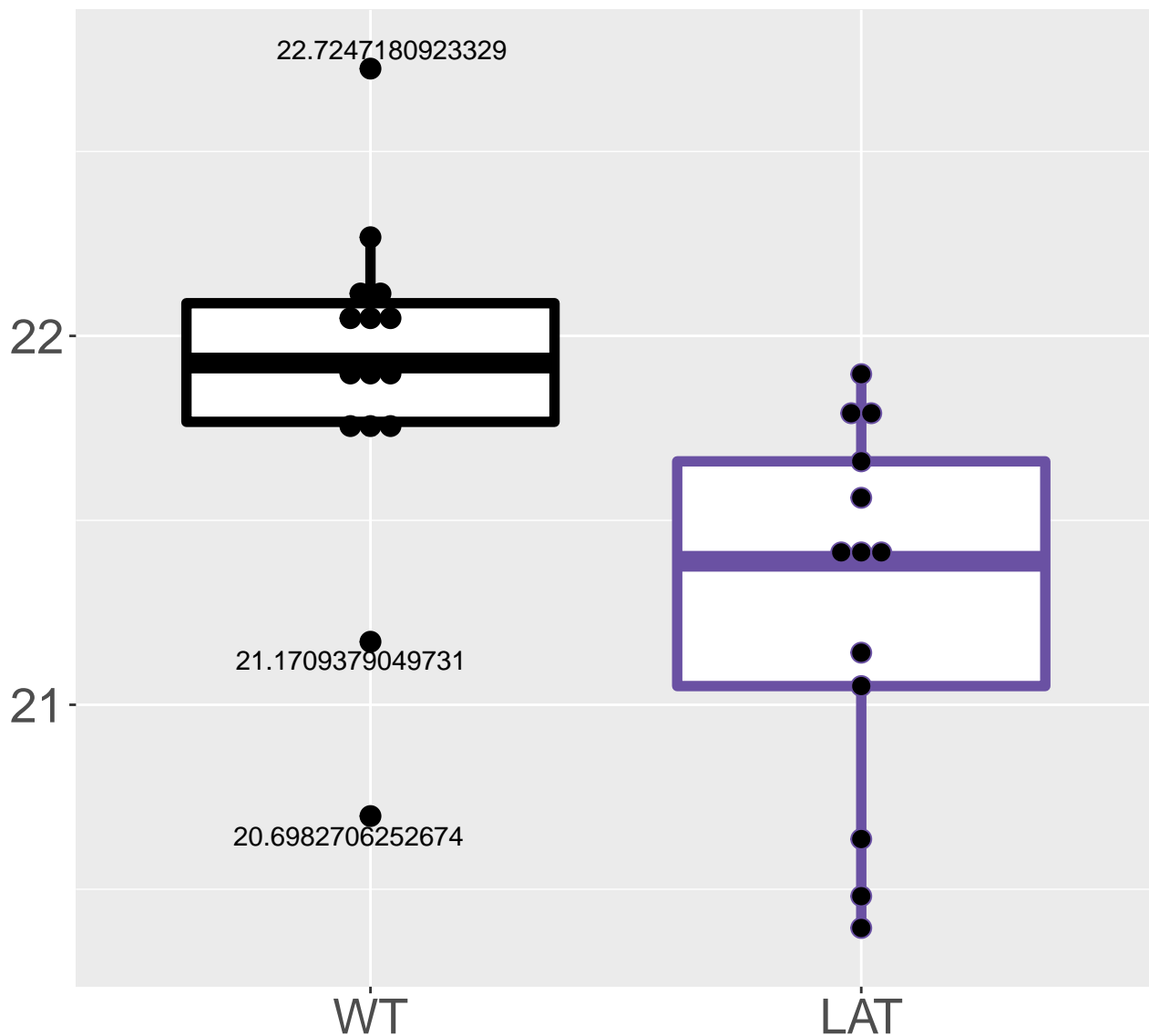
**FDR = 0.013, FC = 1.2**



**FDR = 0.013, FC = 1, sex\*\*\***

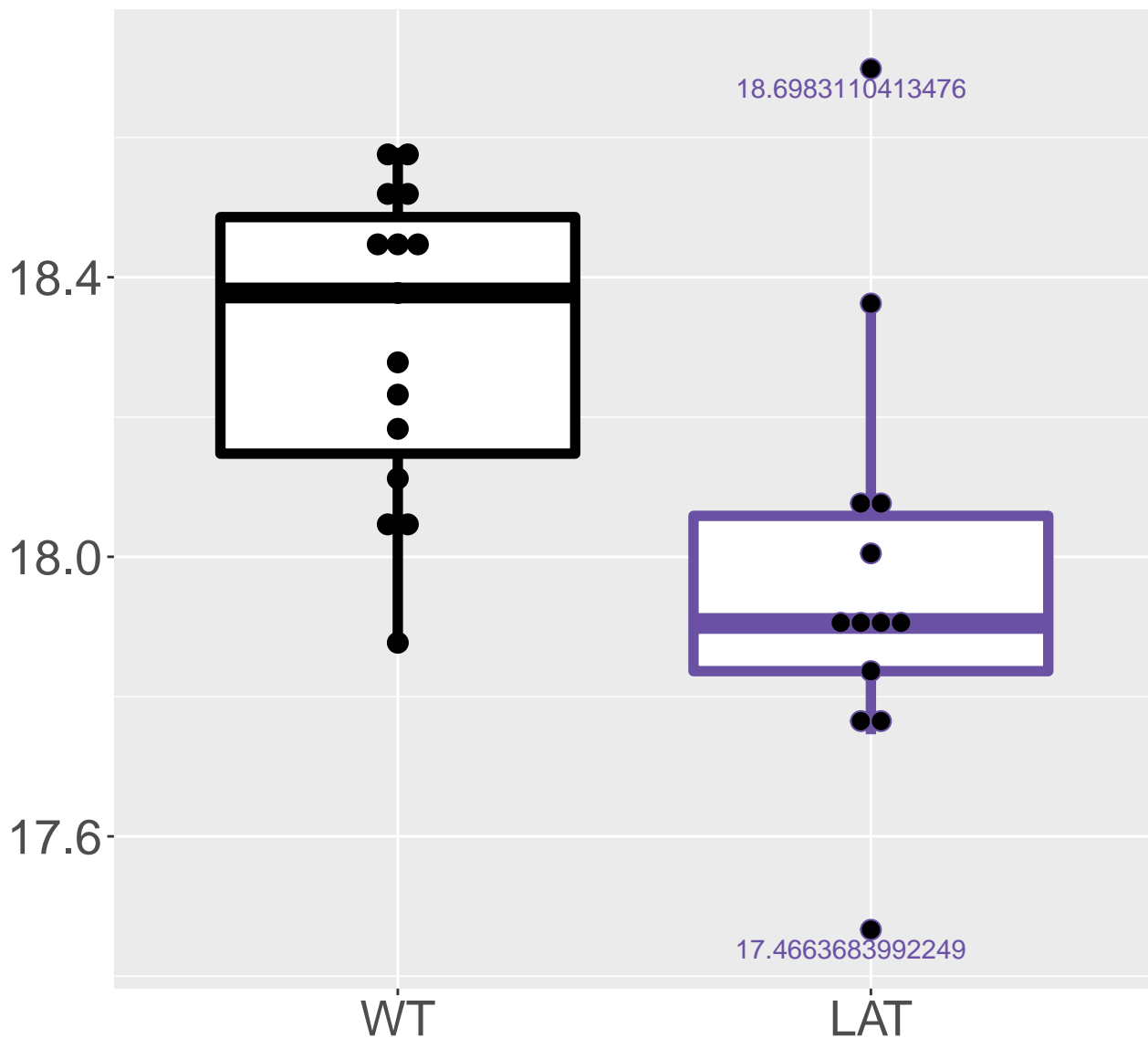


**M278.1248T333.97**  
**FDR = 0.013, FC = -0.6**



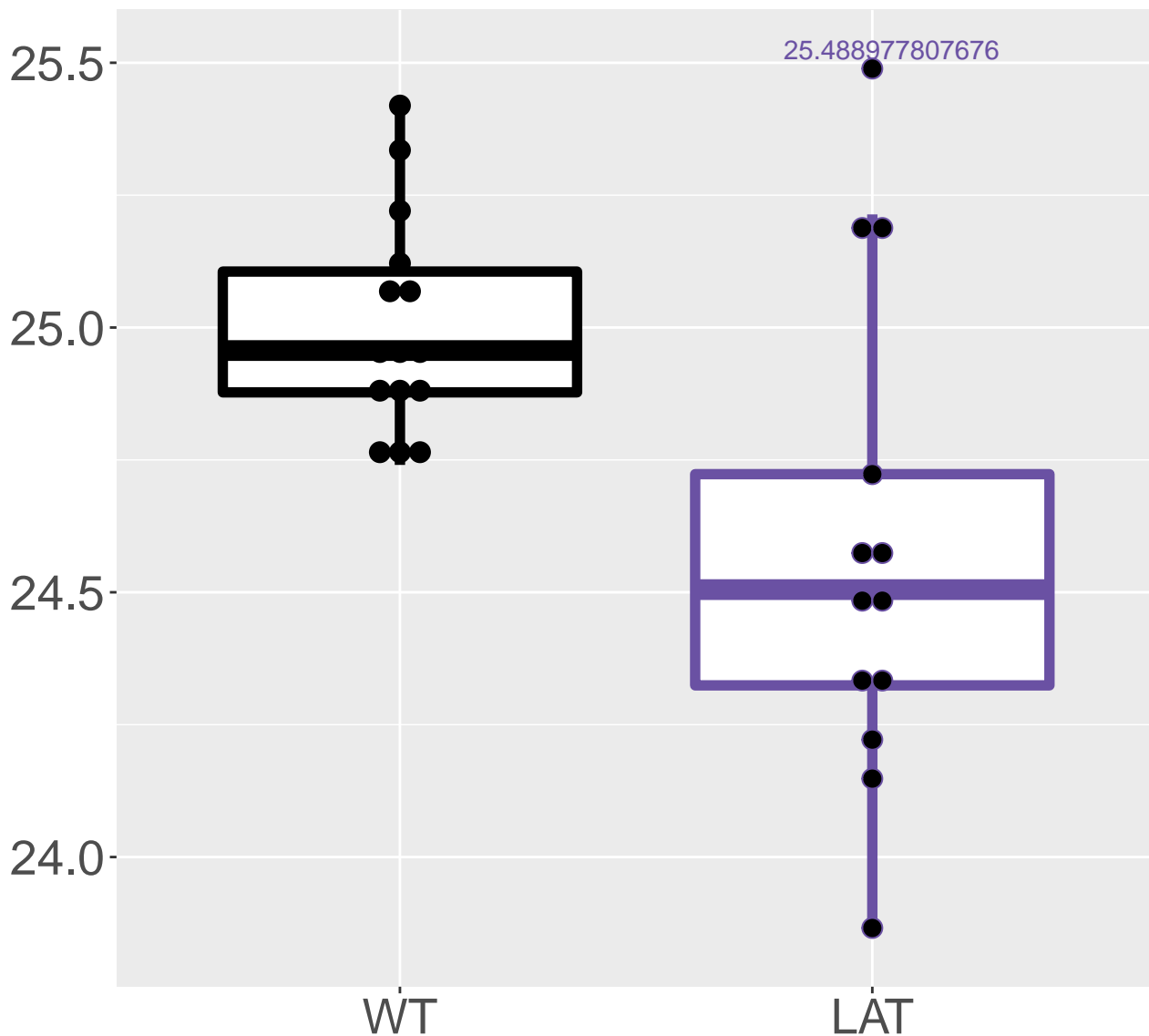
**M264.9922T78.28**

**FDR = 0.013, FC = -0.34**



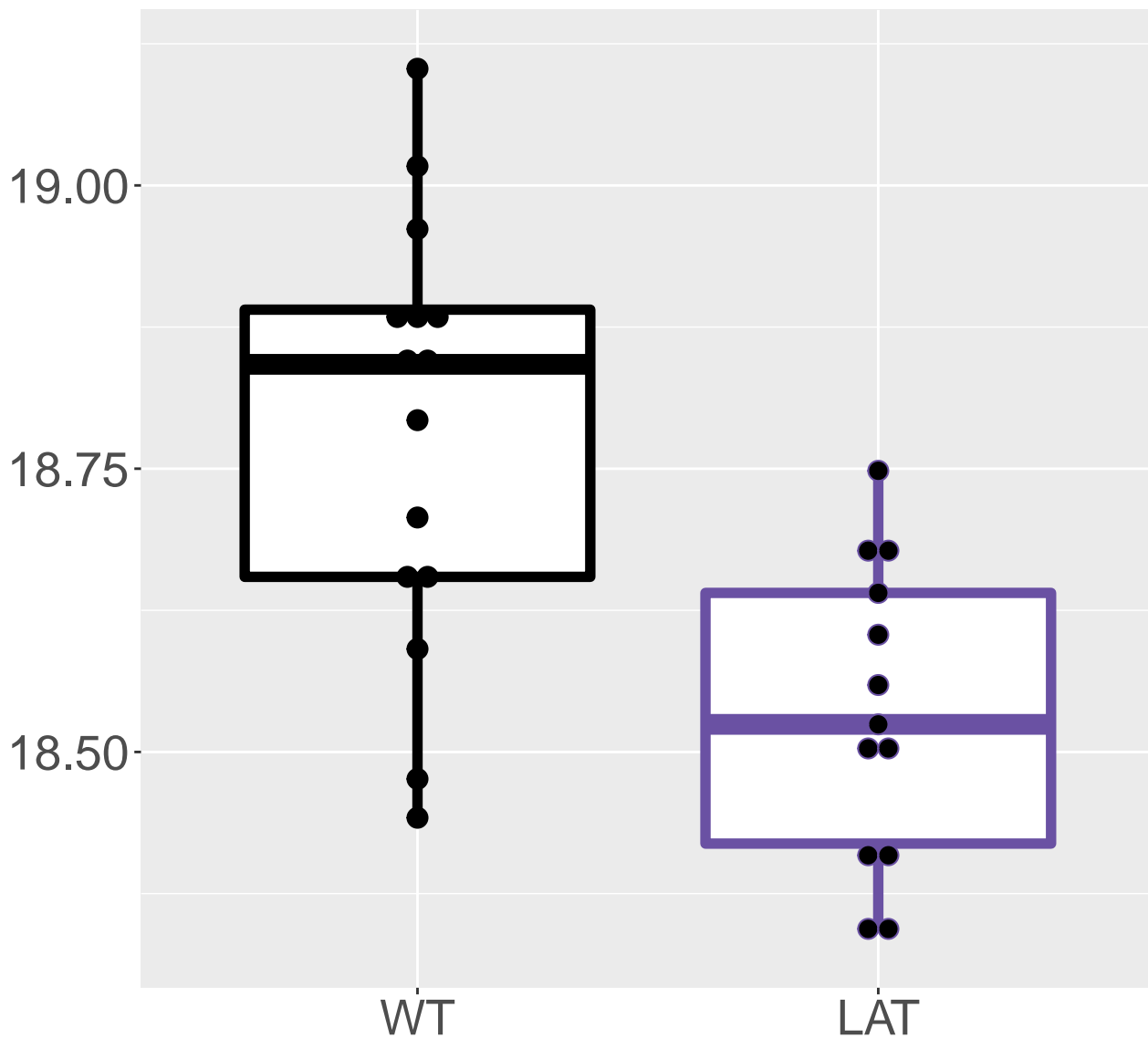
**M91.04T230.99**

**FDR = 0.013, FC = -0.42**



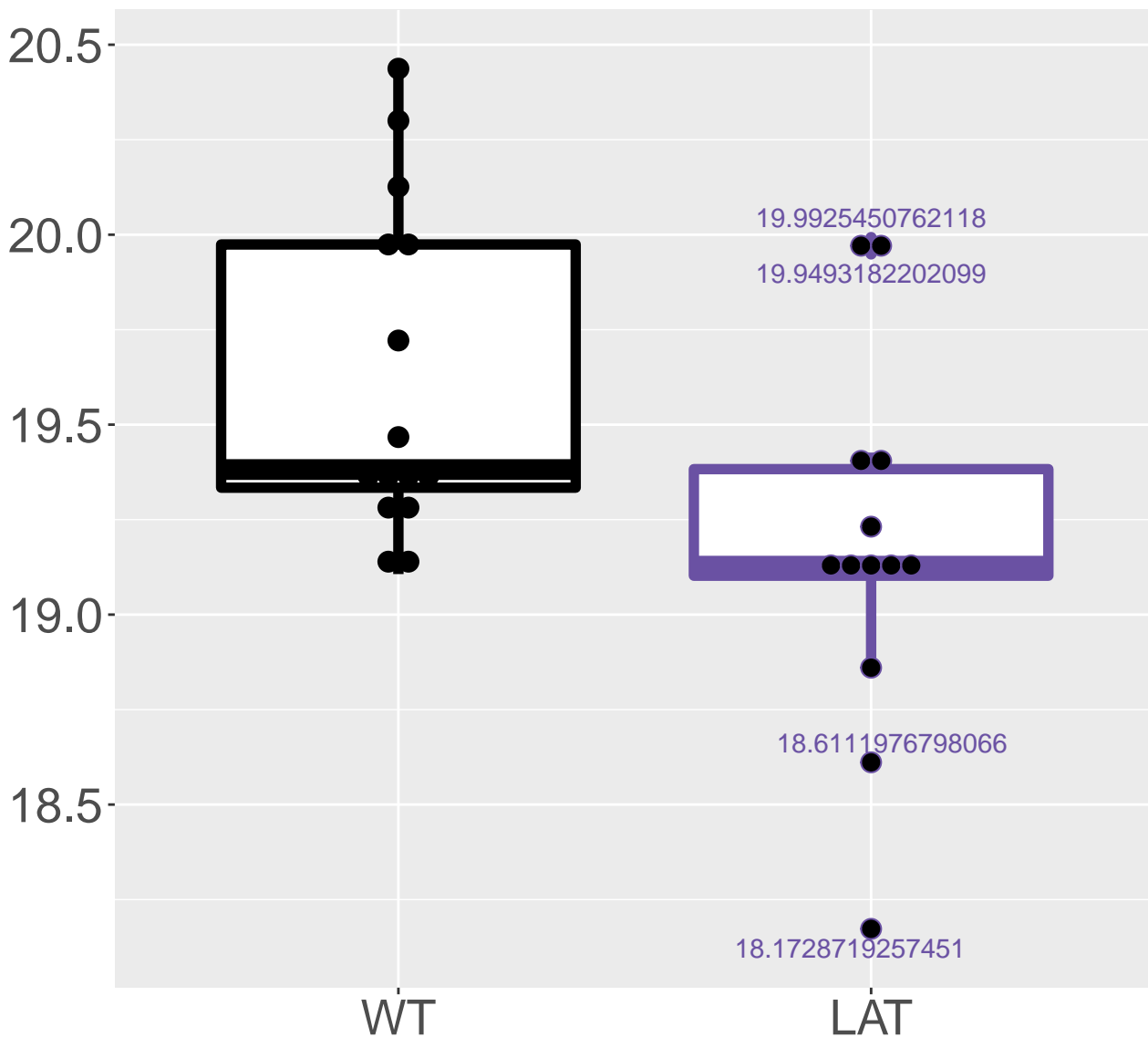
**M137.0105T373.83**

**FDR = 0.013, FC = -0.25**



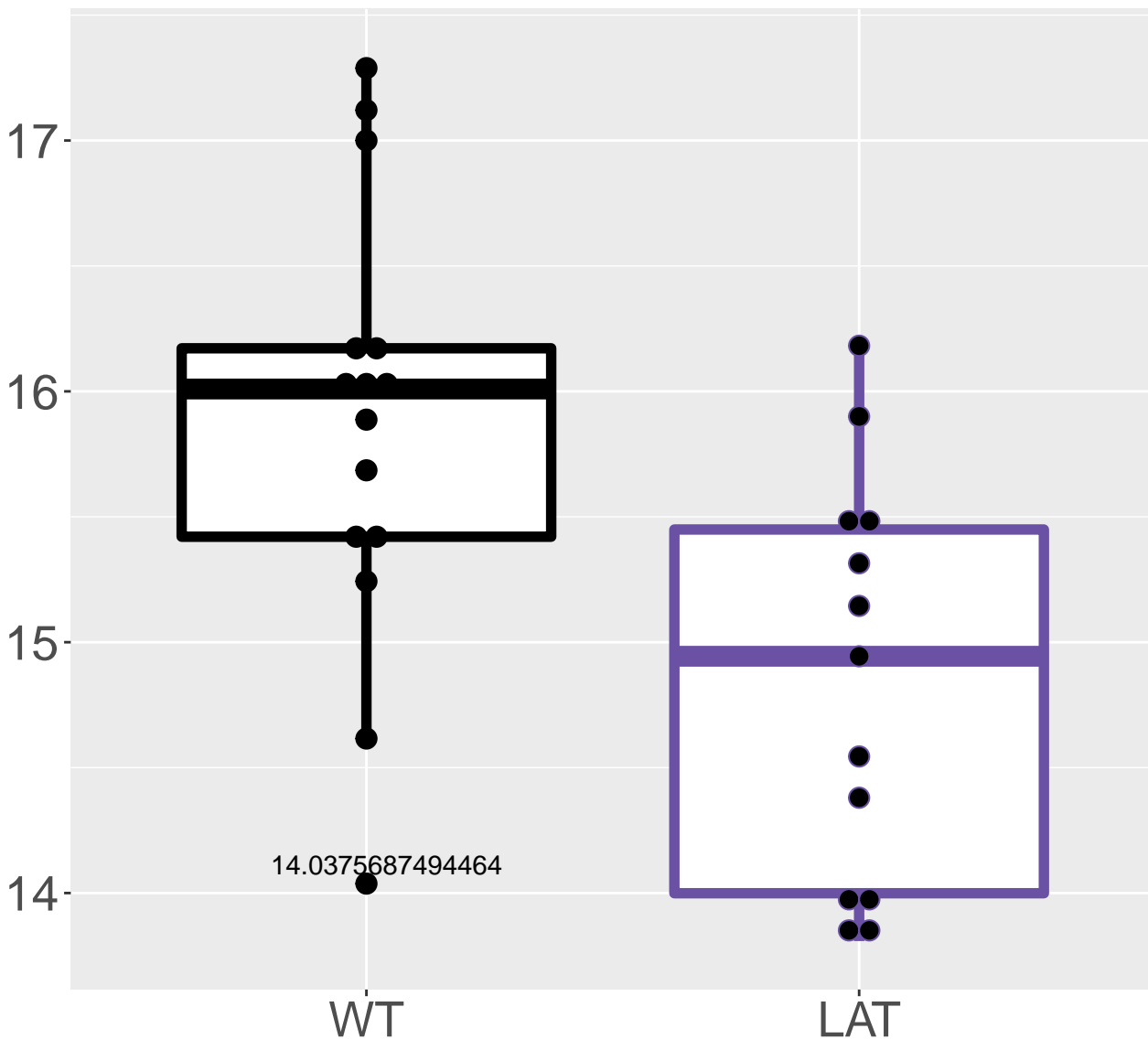
**M628.1768T513.38**

**FDR = 0.014, FC = -0.45, sex\***



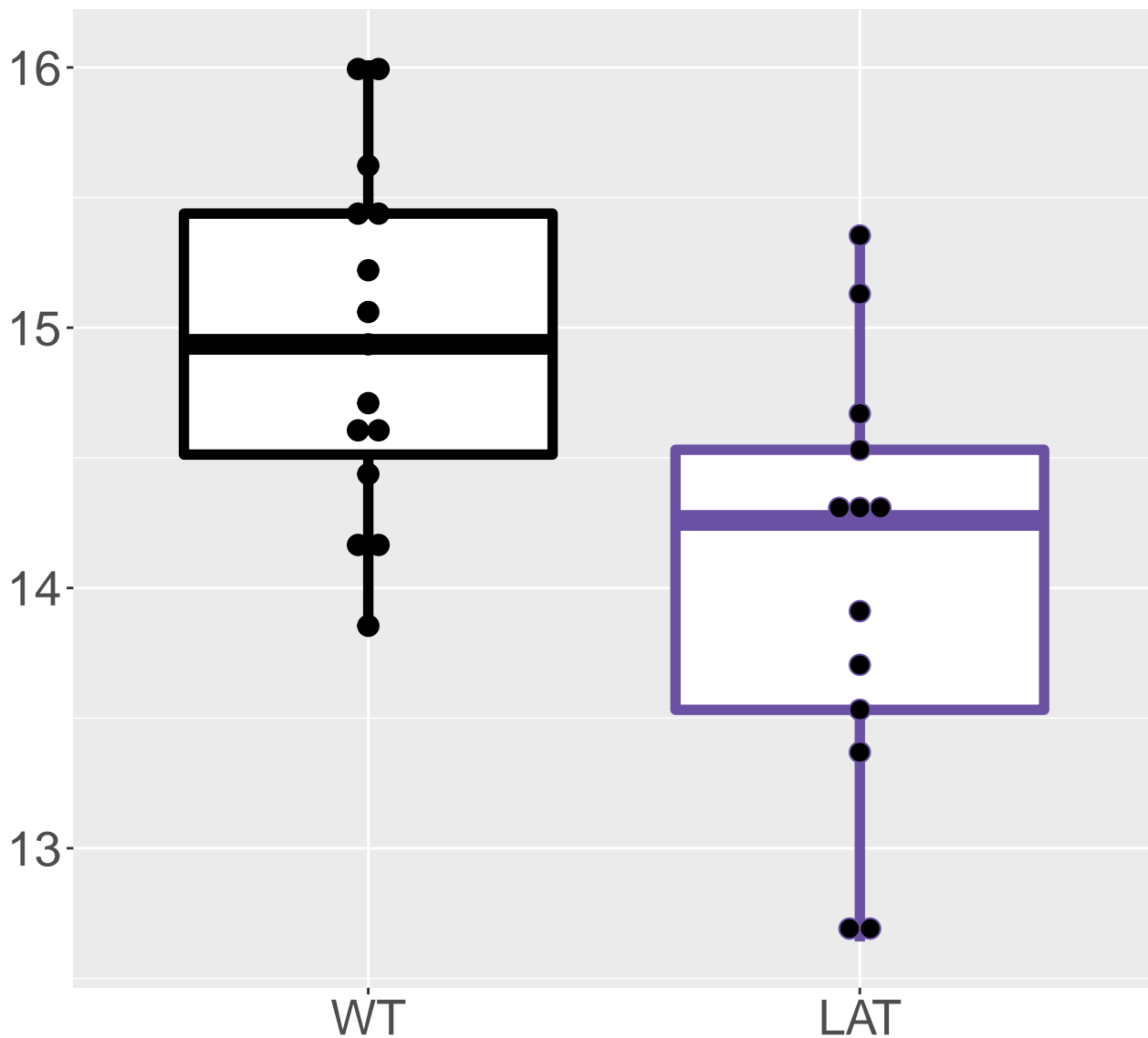


**FDR = 0.014, FC = -1**

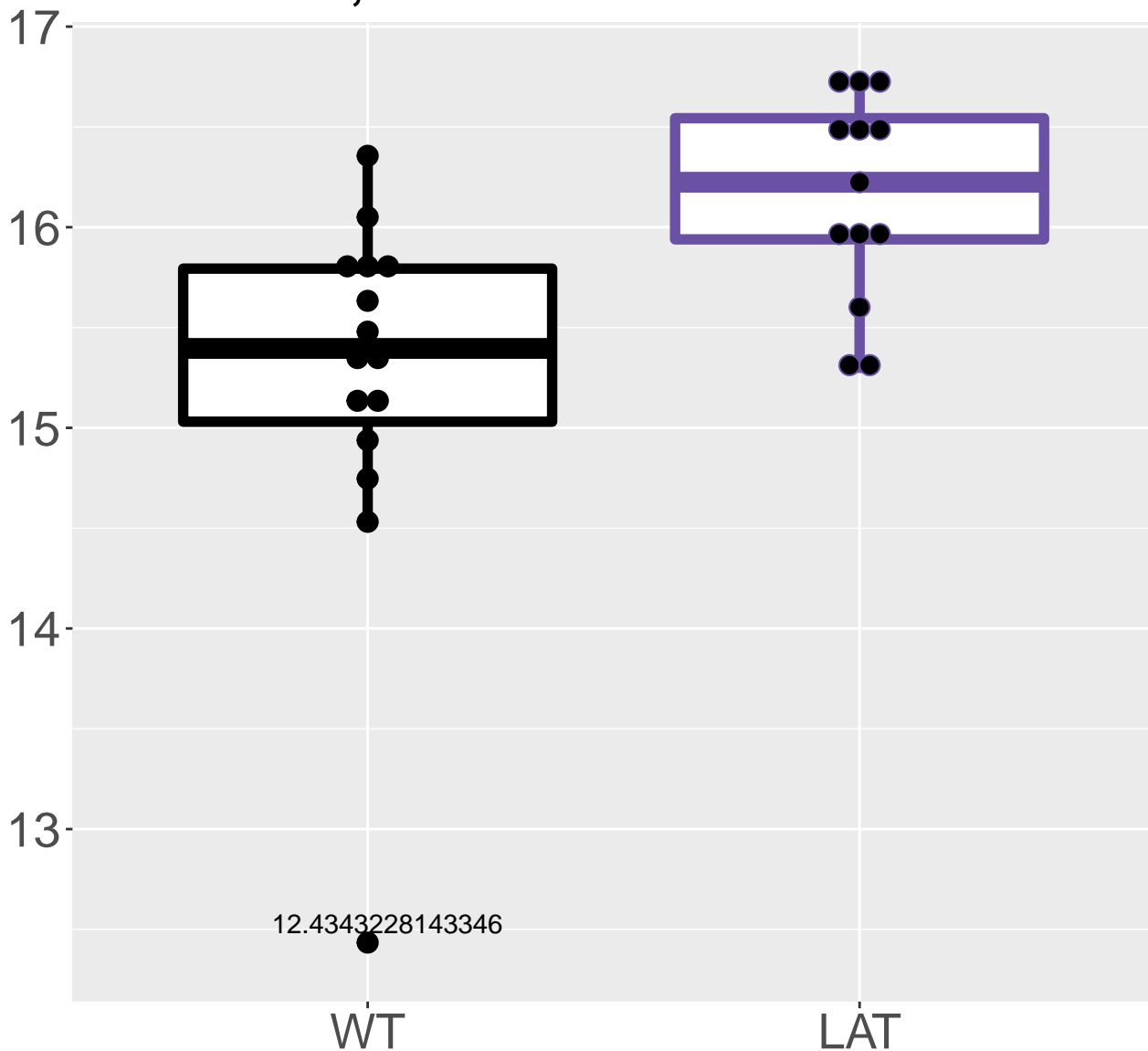


**M351.1052T567.34**

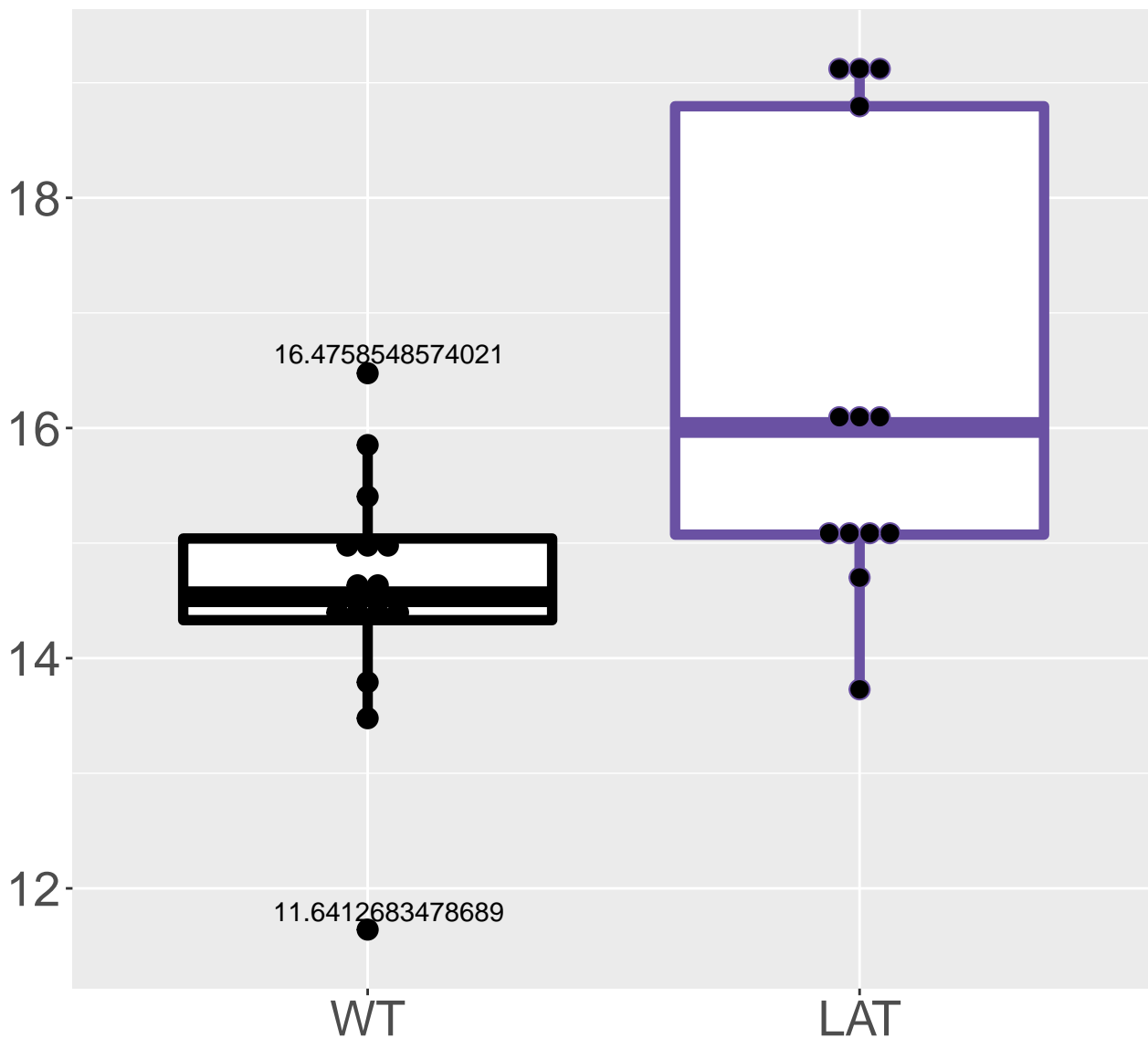
**FDR = 0.015, FC = -0.91**



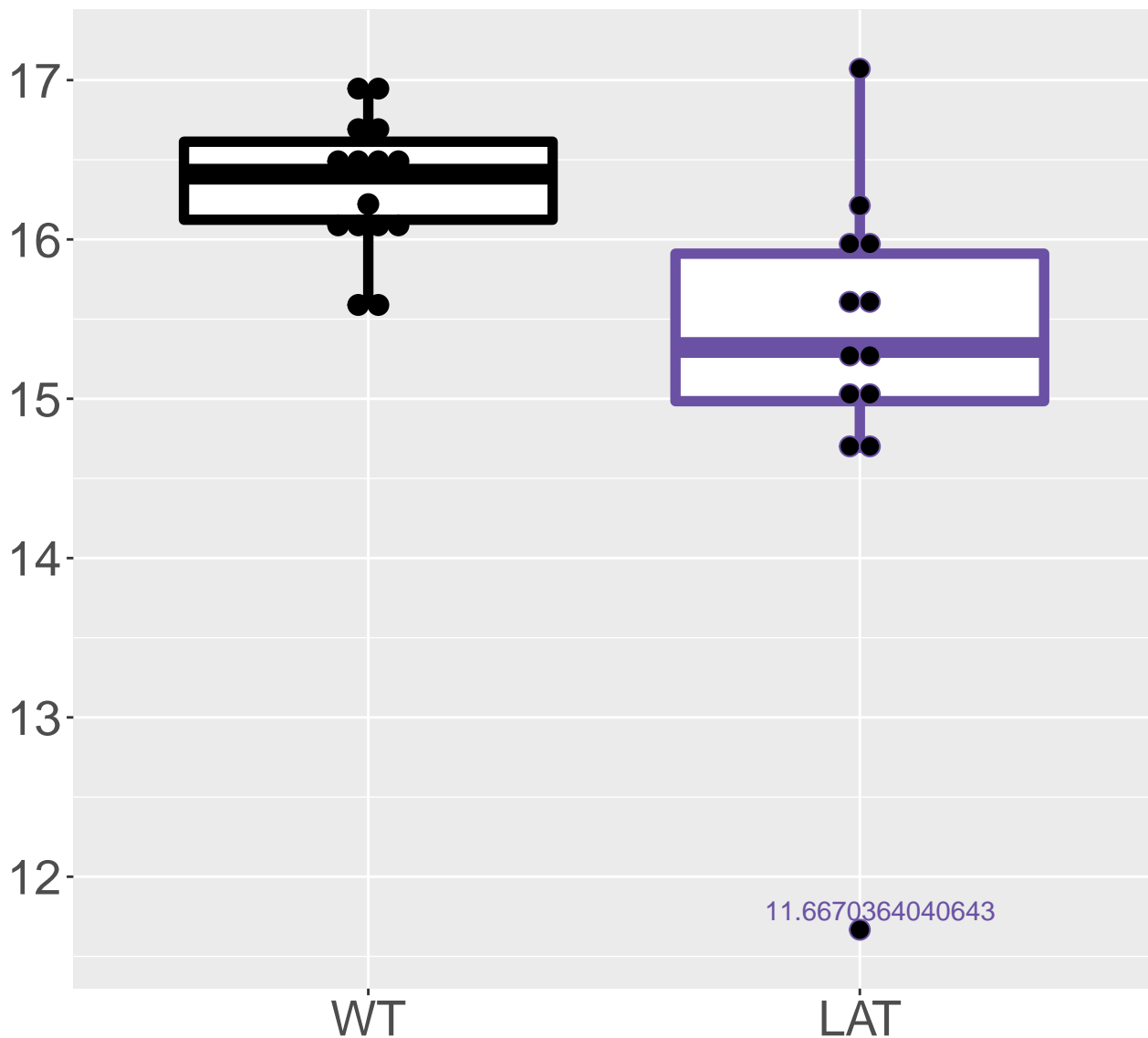
**M327.0718T588.58\_2**  
**FDR = 0.015, FC = 0.92**



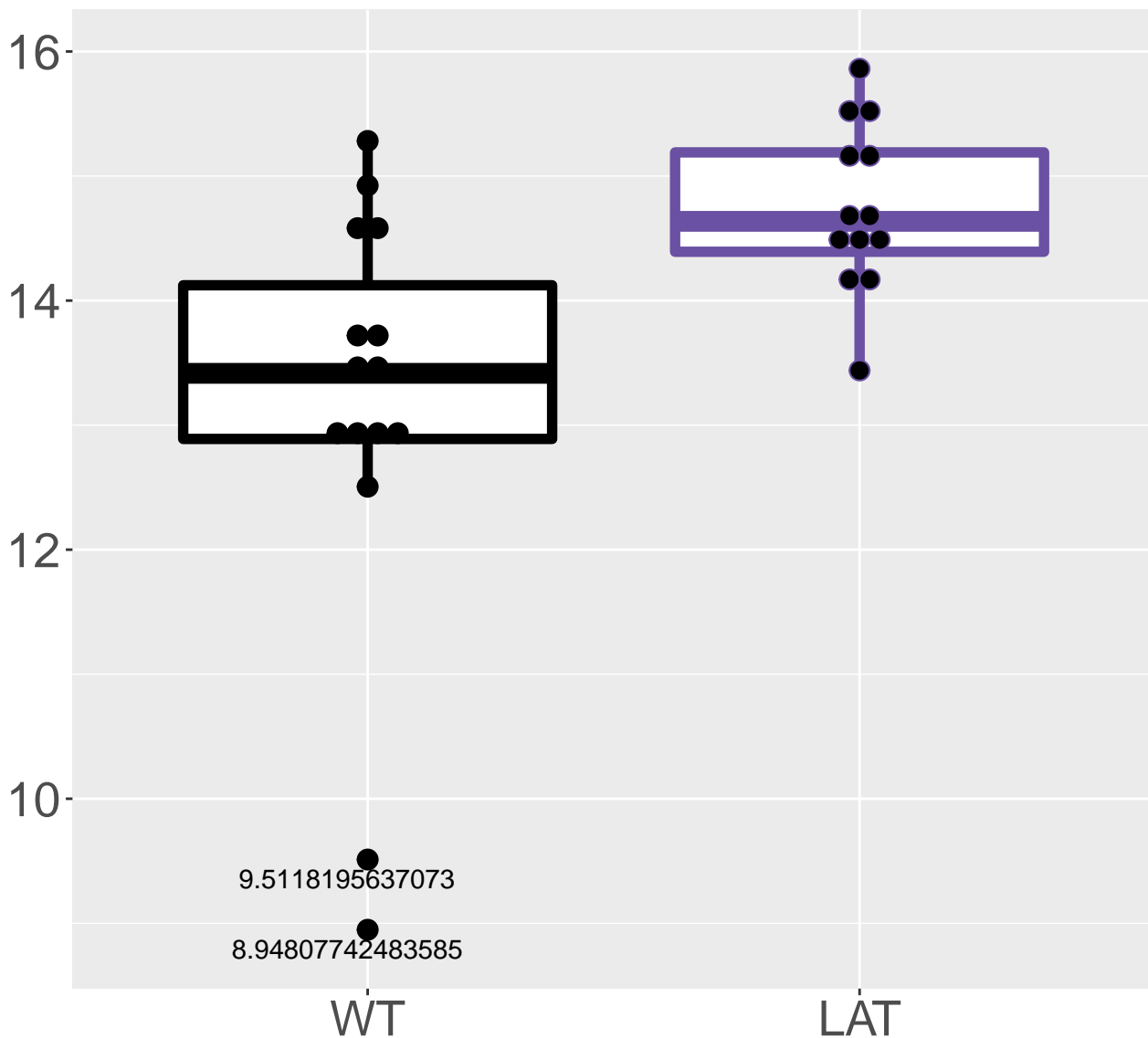
**Î±-D-Glucose 1,6-bisphosphate|D-myo-Inositol**  
FDR = 0.015, FC = 1.8



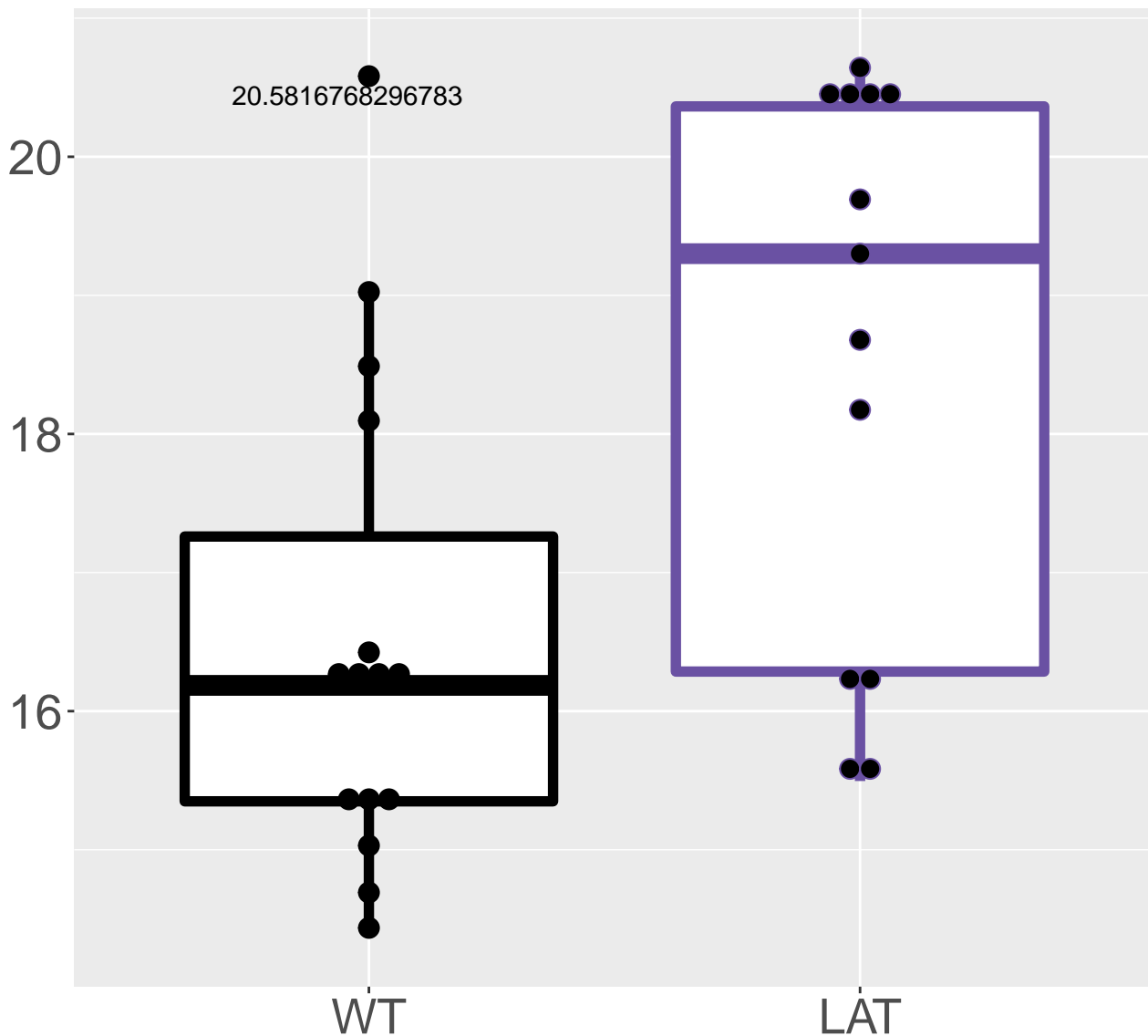
**M272.5846T608.1**  
**FDR = 0.016, FC = -1.1**



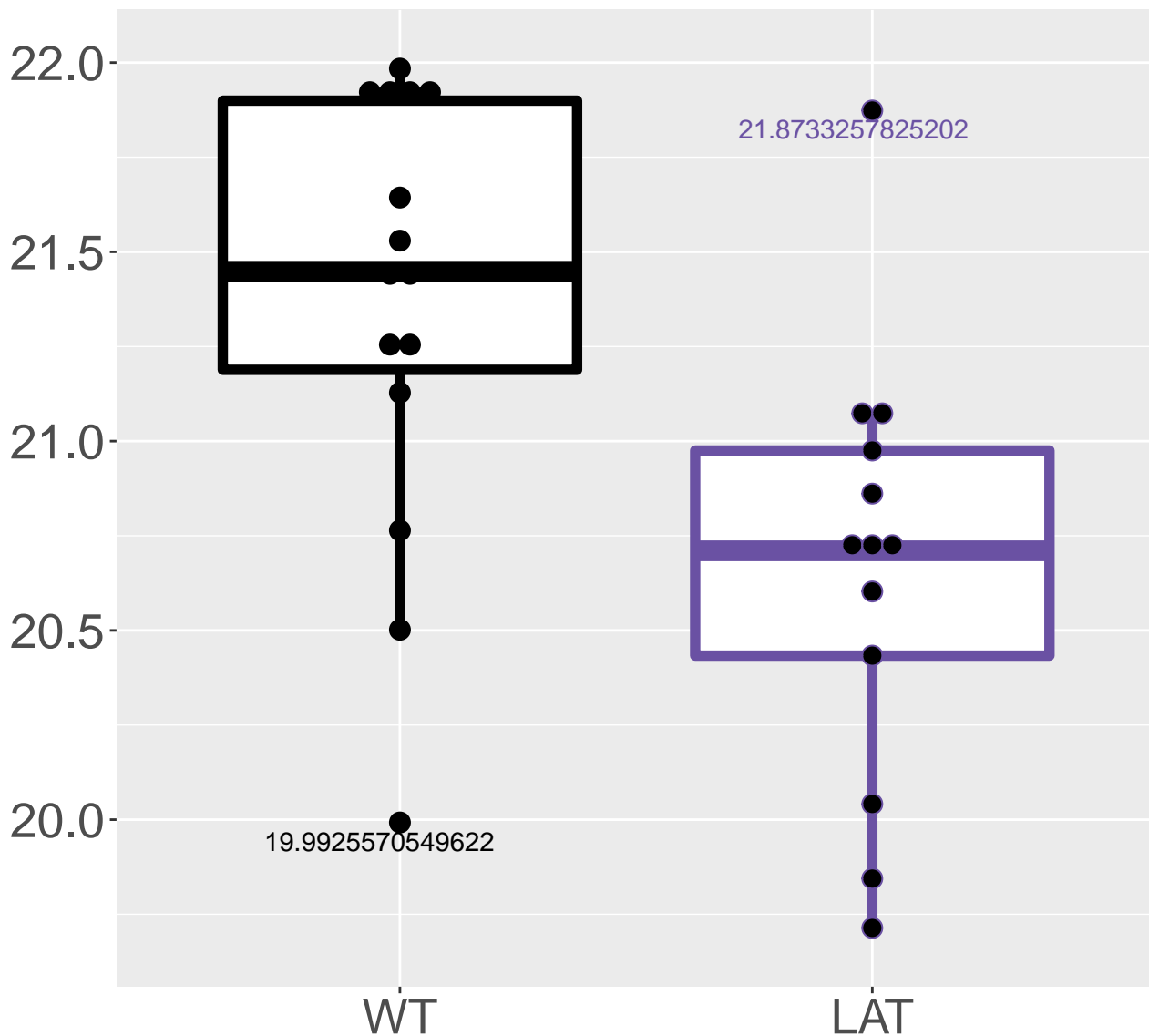
**M316.0346T583.07**  
**FDR = 0.016, FC = 1.7**



**M230.53T612.81\_1**  
**FDR = 0.016, FC = 2.1**



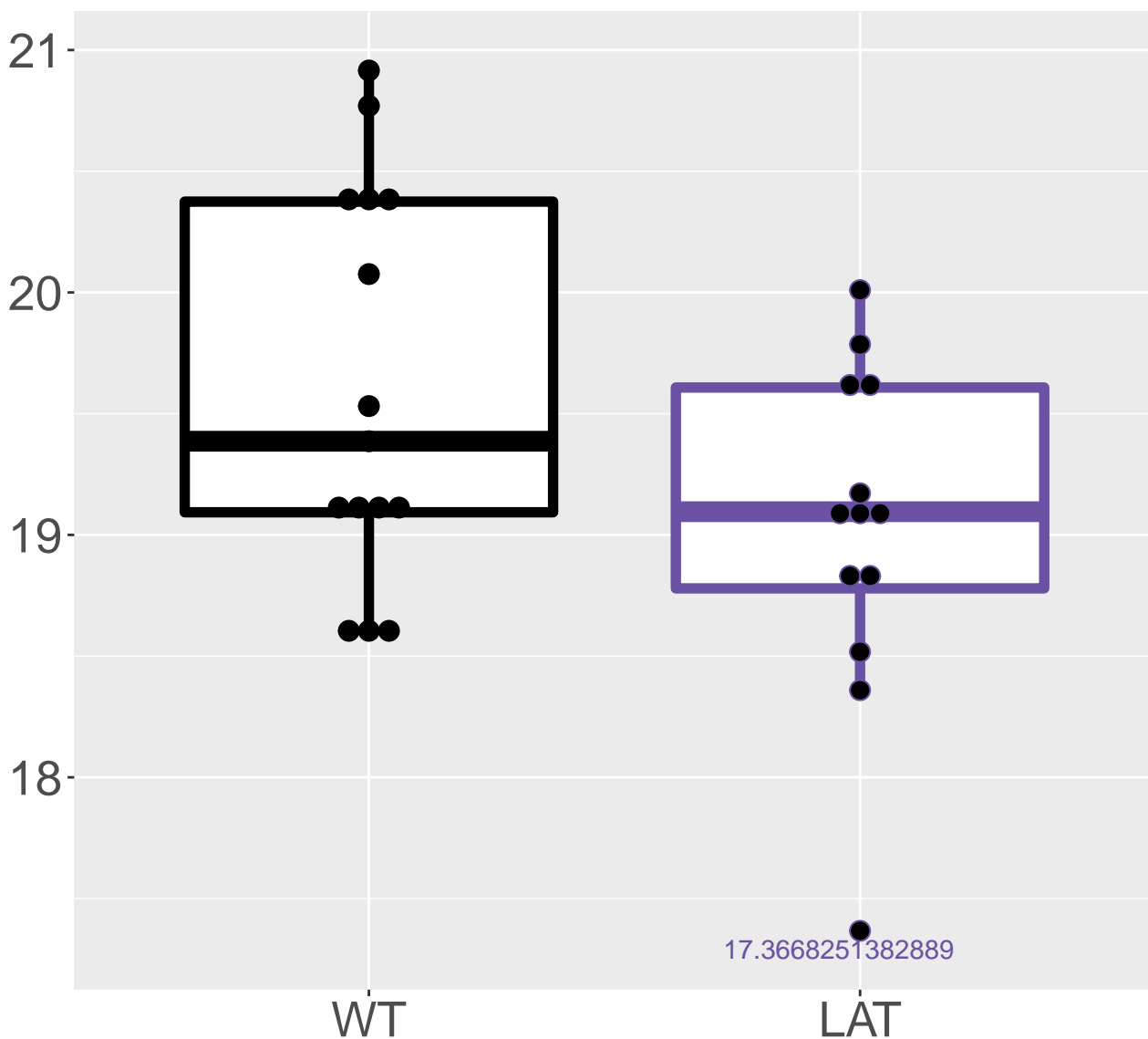
**M561.4894T77.86**  
**FDR = 0.016, FC = -0.71**



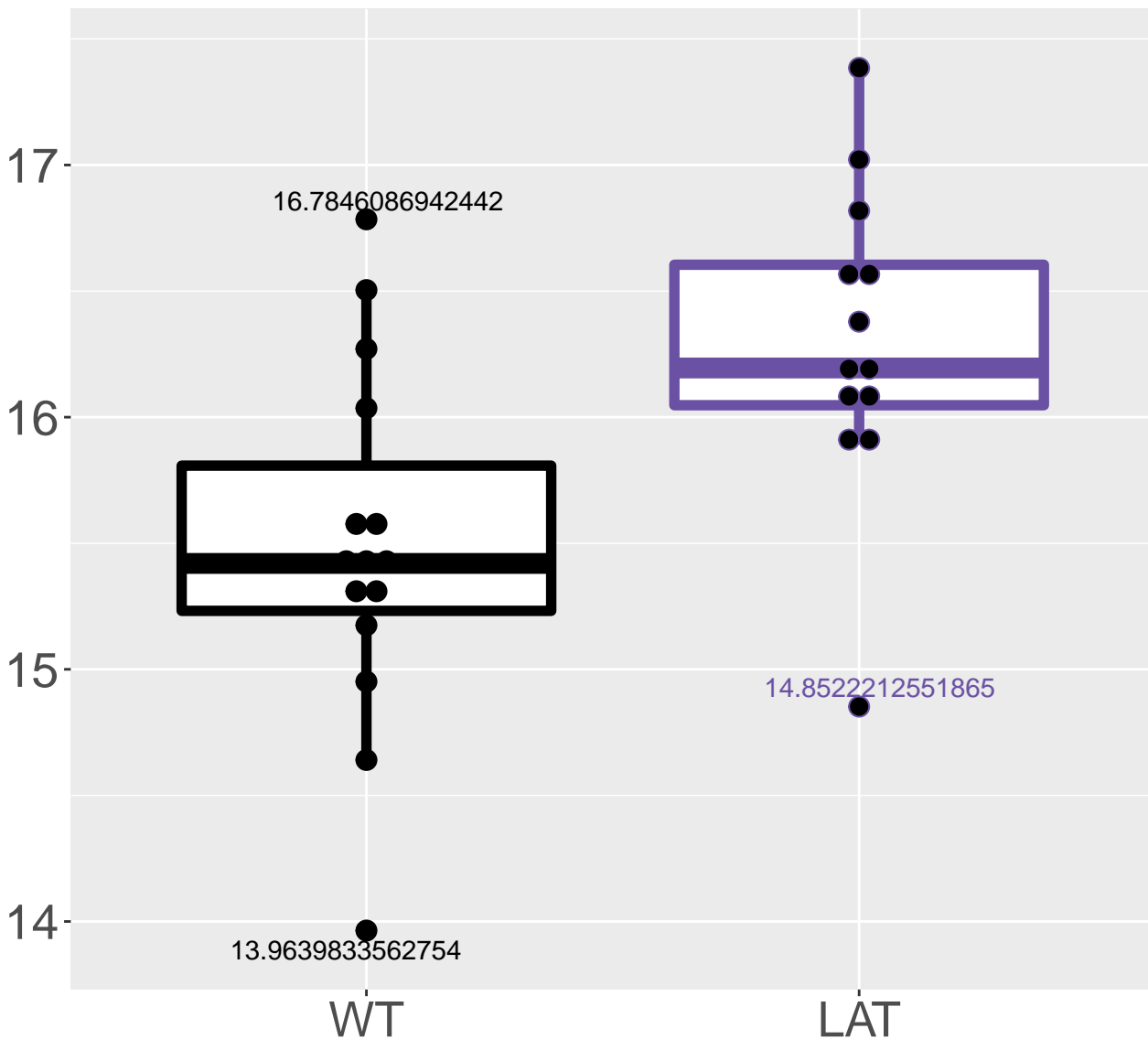


**M509.4581T78.64**

**FDR = 0.016, FC = -0.58, sex\*\***

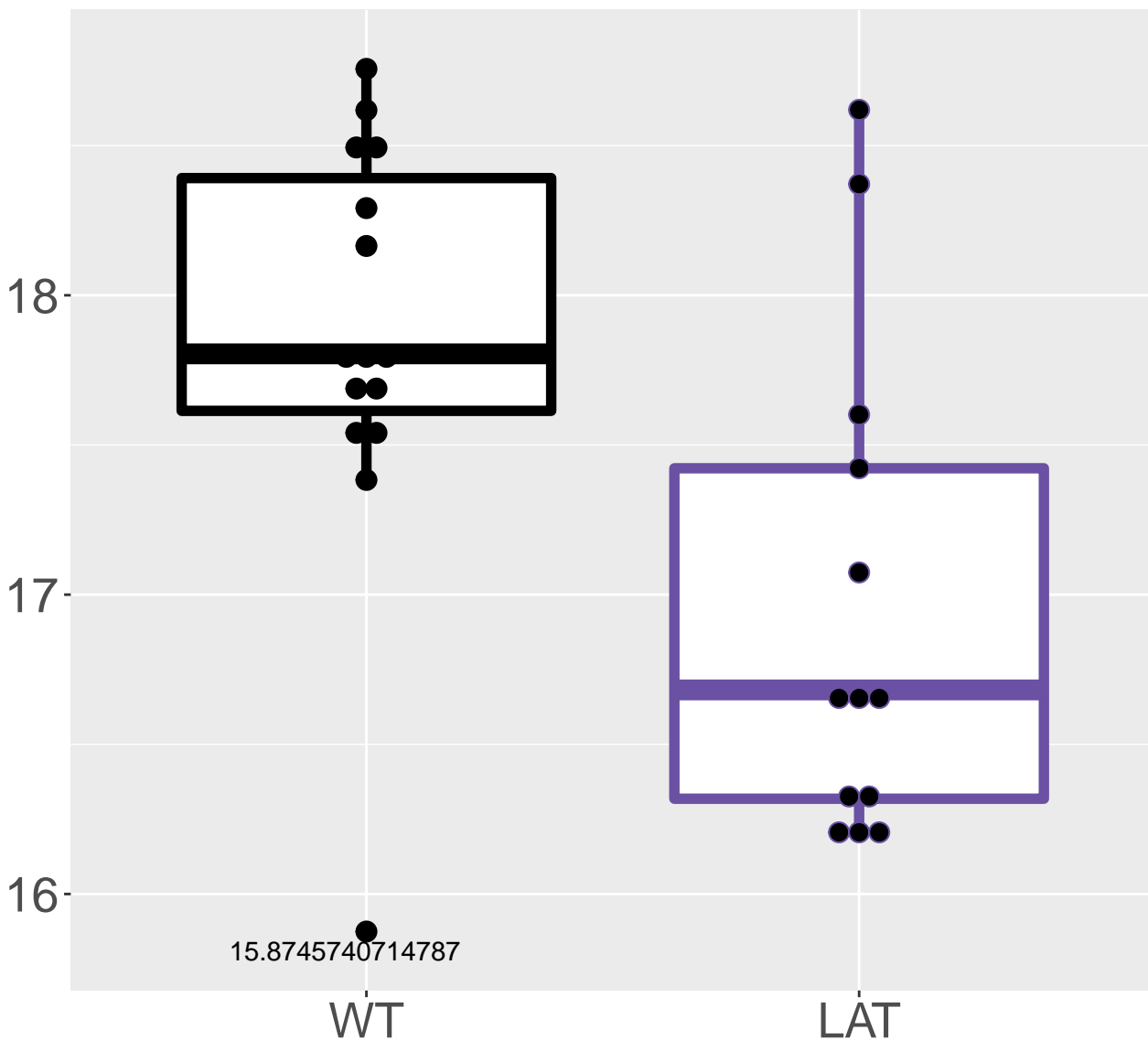


**M267.5398T590.15**  
**FDR = 0.016, FC = 0.81**



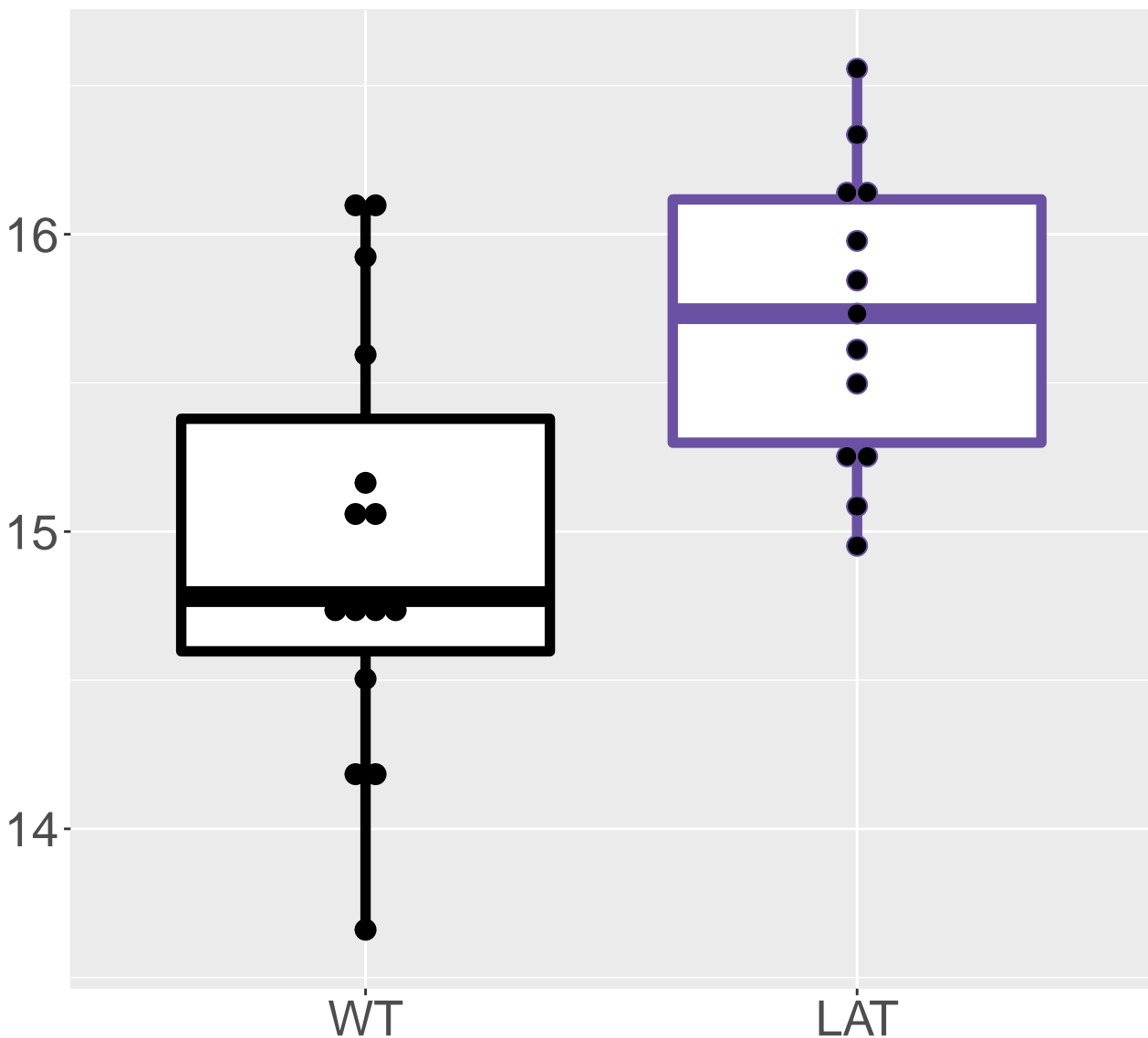
**M563.177T538.05**

**FDR = 0.017, FC = -0.91**

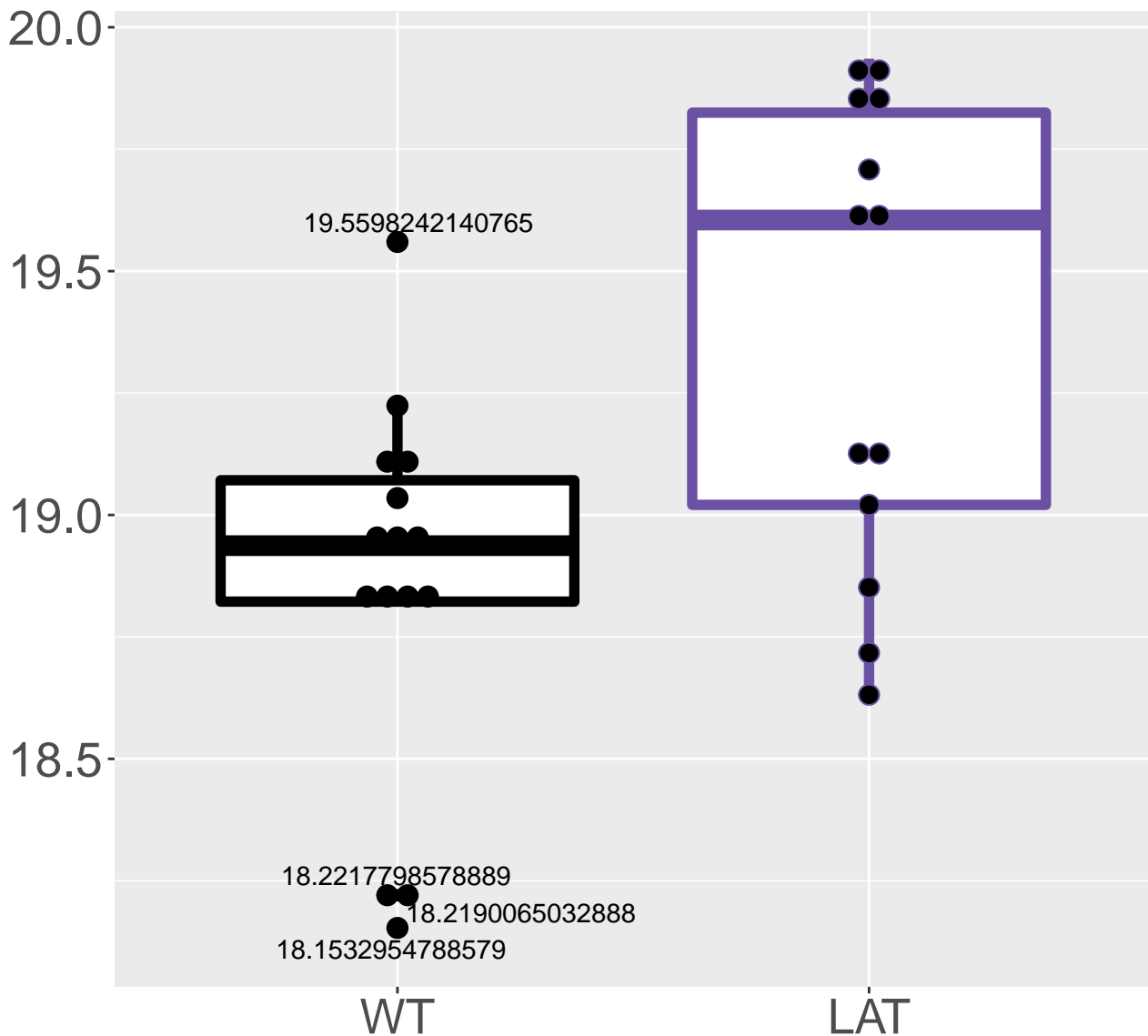


**M226.003T562.56**

**FDR = 0.017, FC = 0.76**

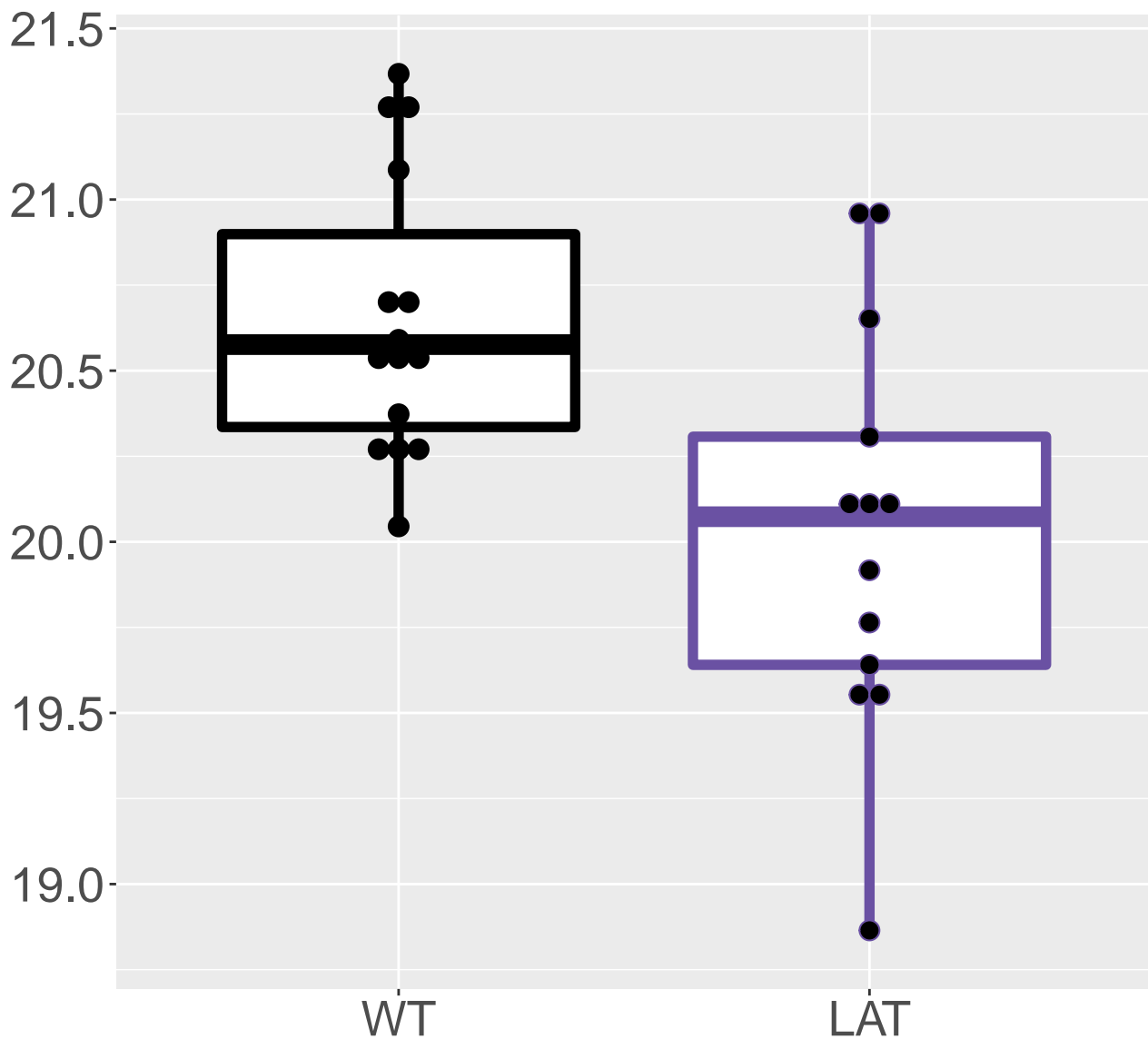


**M217.0471T589.12\_1**  
**FDR = 0.017, FC = 0.53**



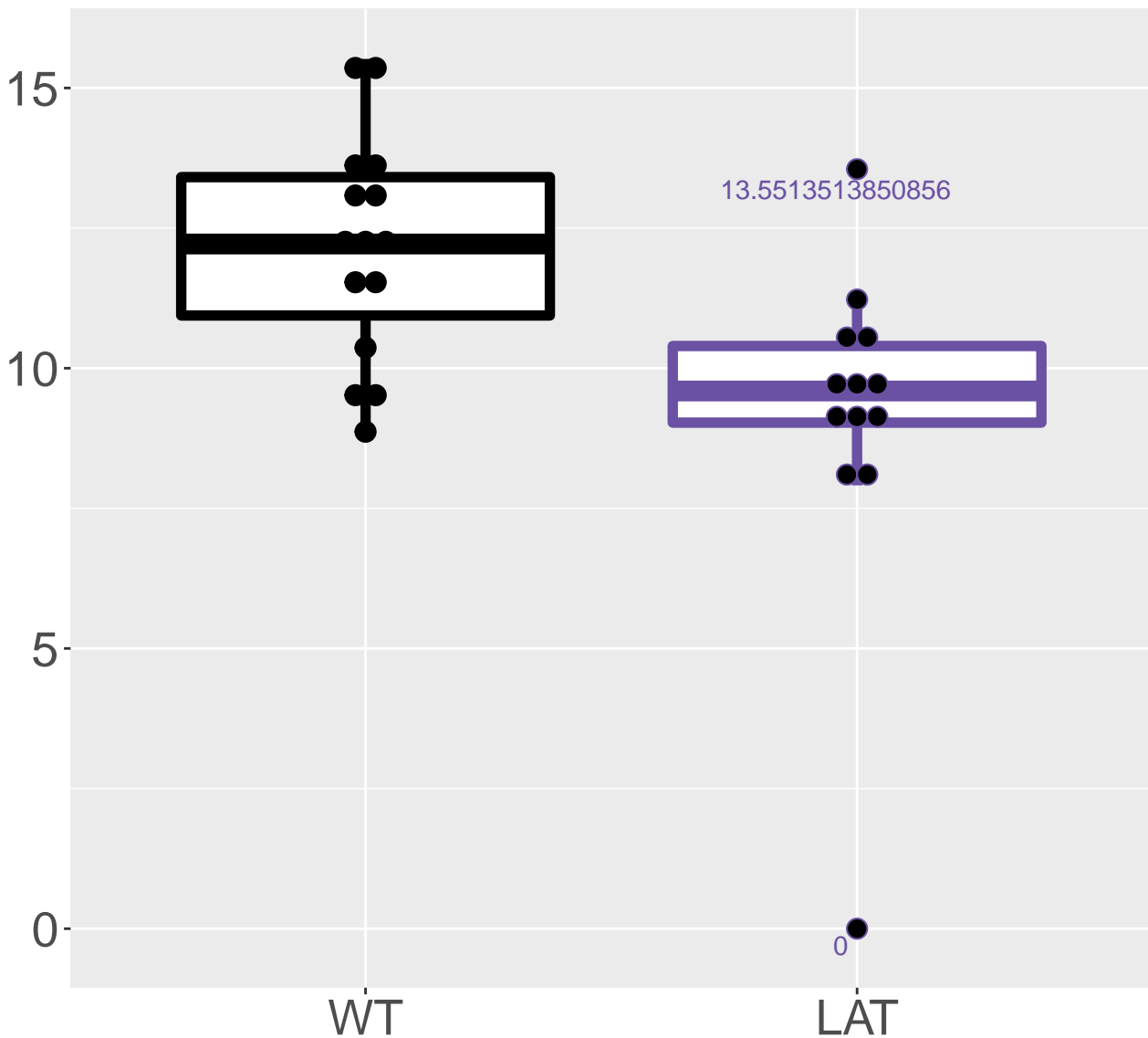
**M180.0164T275.73**

**FDR = 0.017, FC = -0.61**



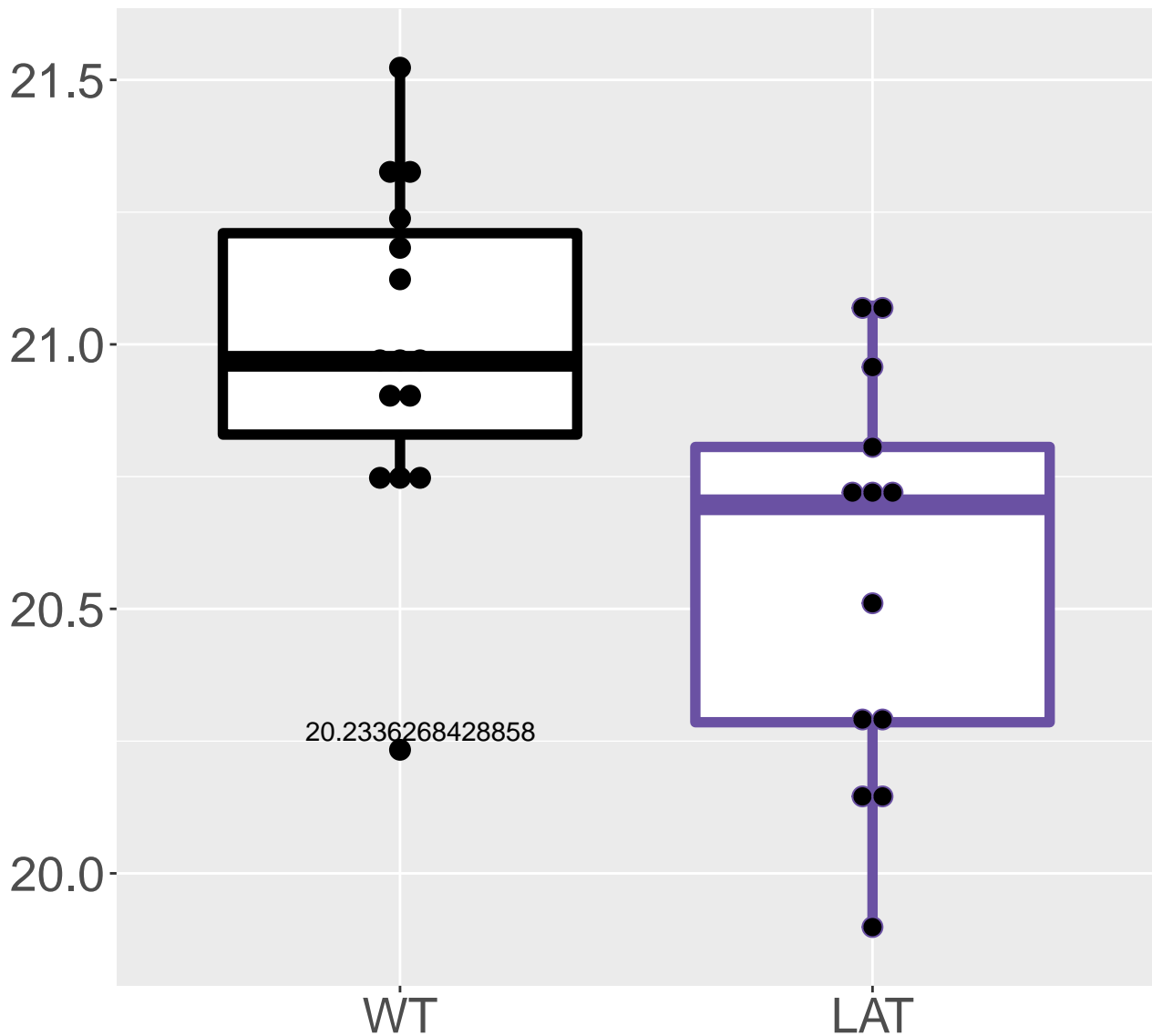
**M239.079T160.97**

**FDR = 0.017, FC = -3**



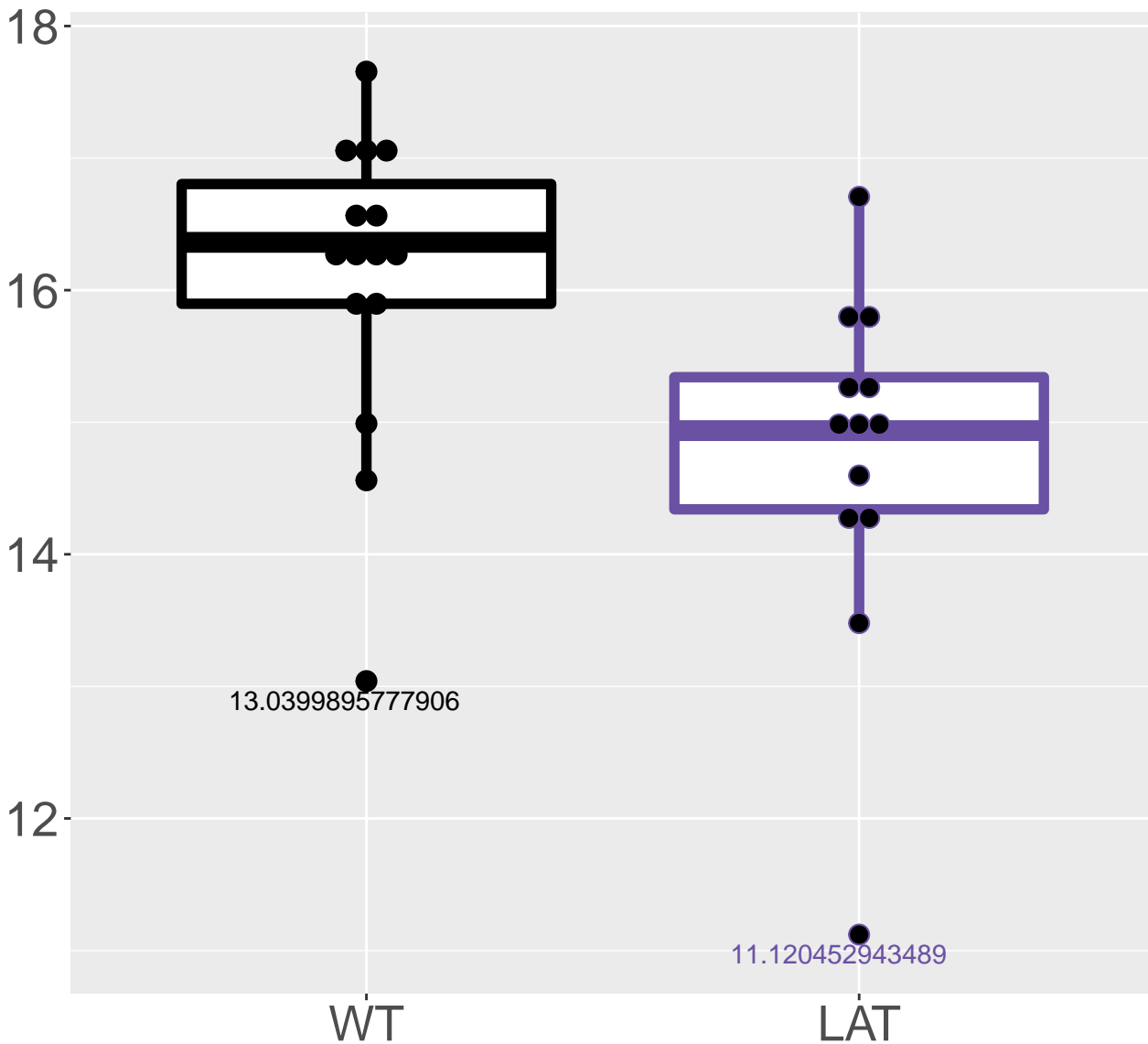
**M148.0616T309.39**

**FDR = 0.017, FC = -0.43**

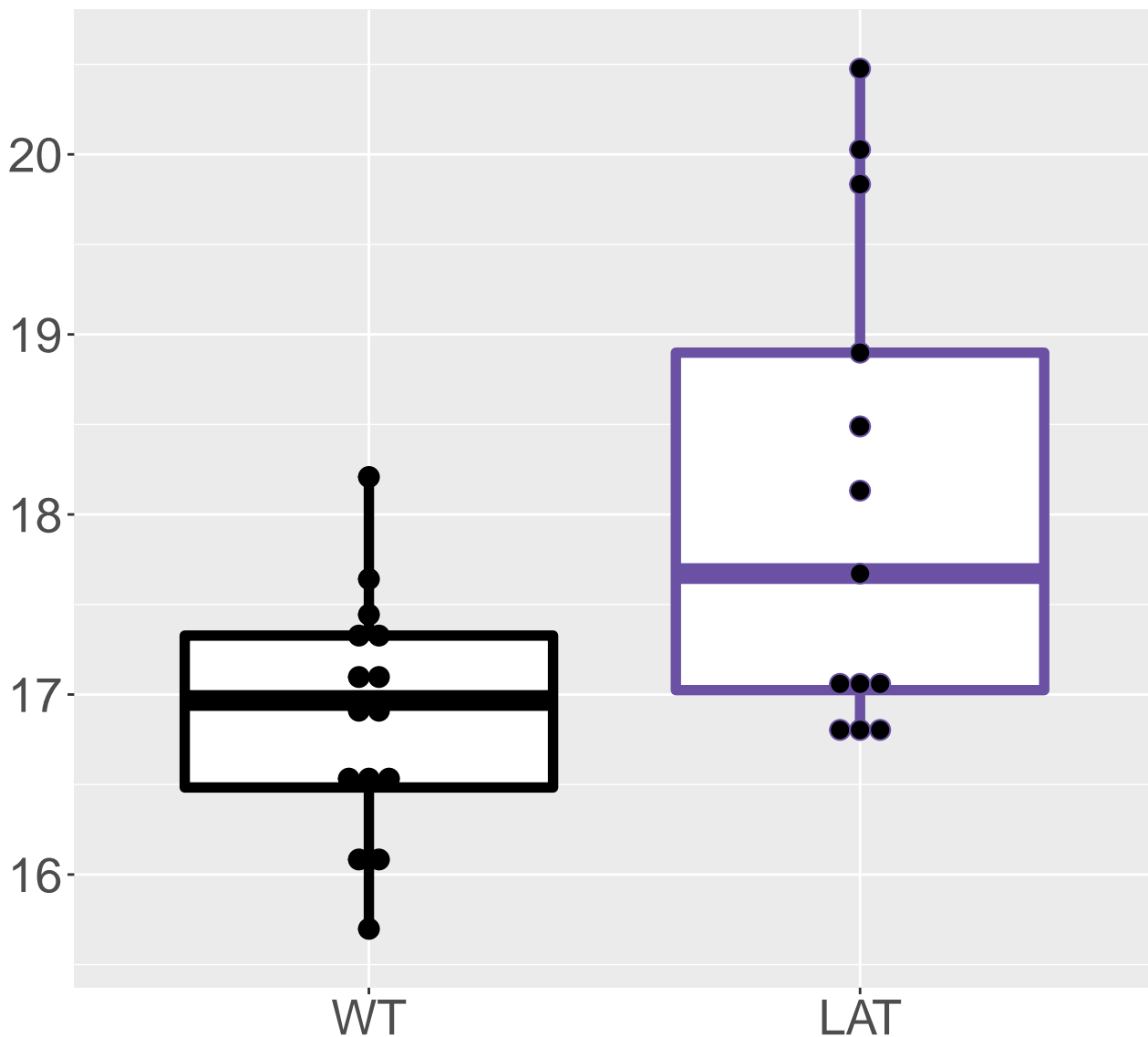




**M374.0861T339.07**  
**FDR = 0.017, FC = -1.4**

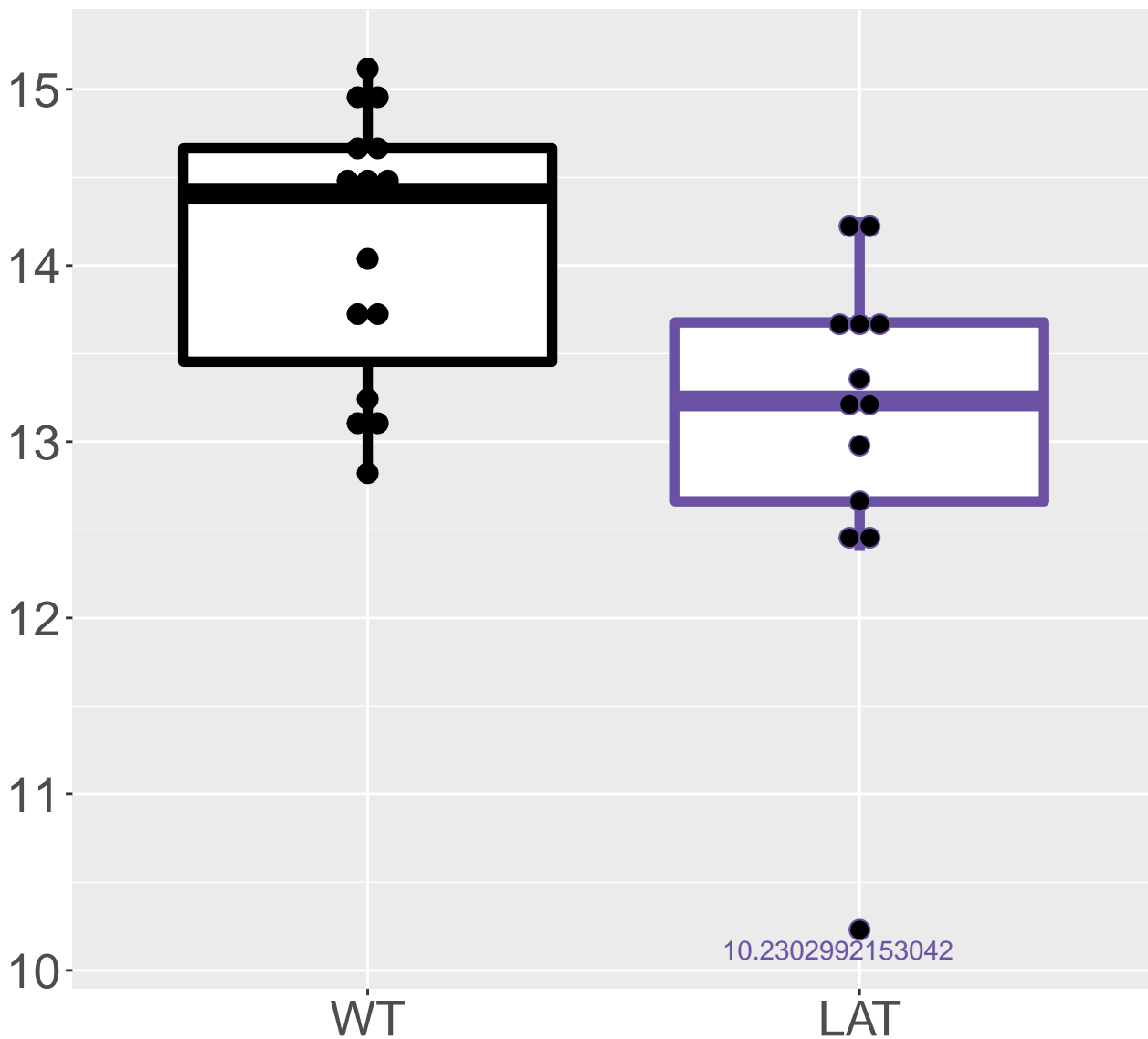


**M143.9762T182.07**  
**FDR = 0.017, FC = 1.2**



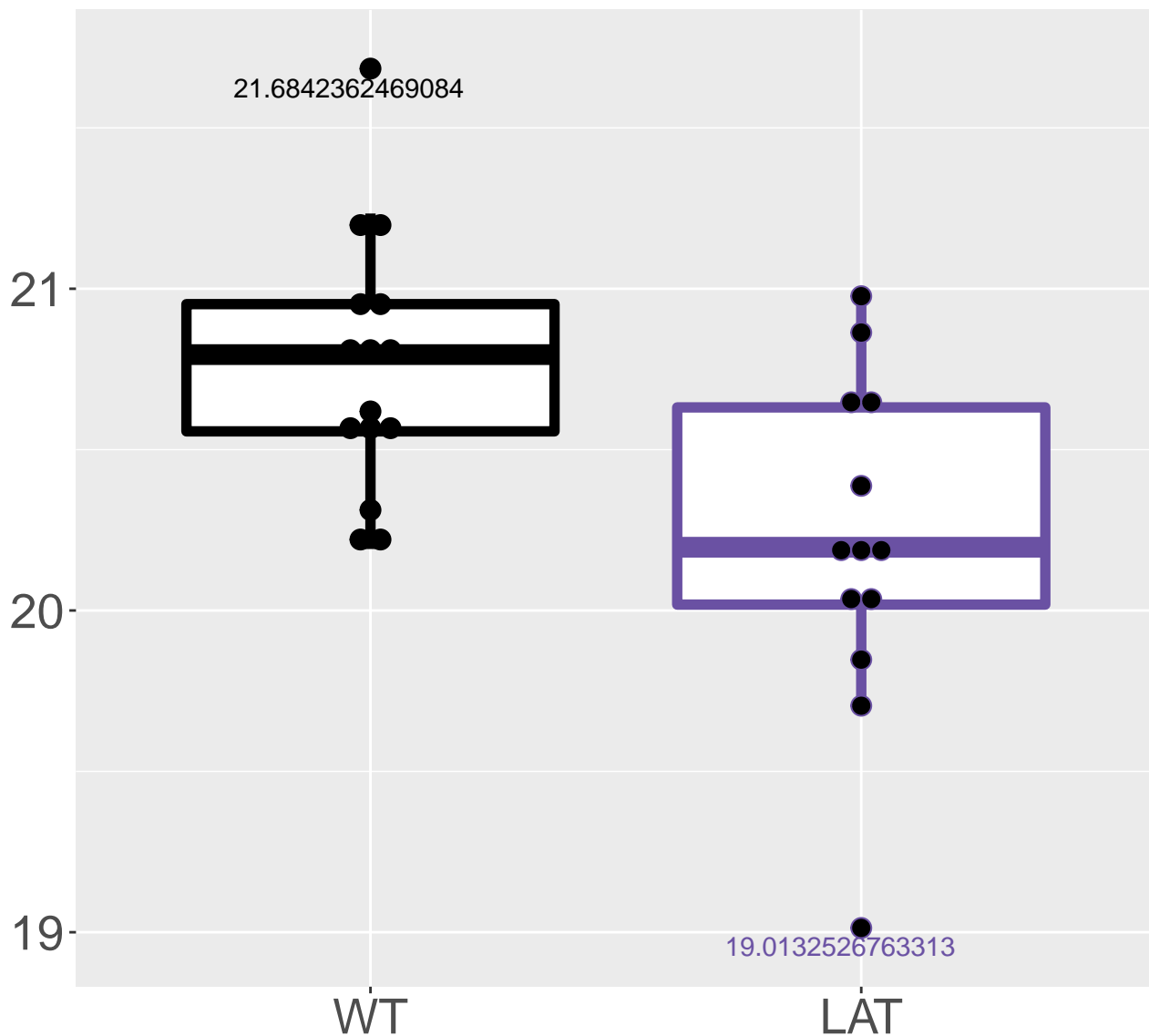
**M401.1239T393.42**

**FDR = 0.017, FC = -1**



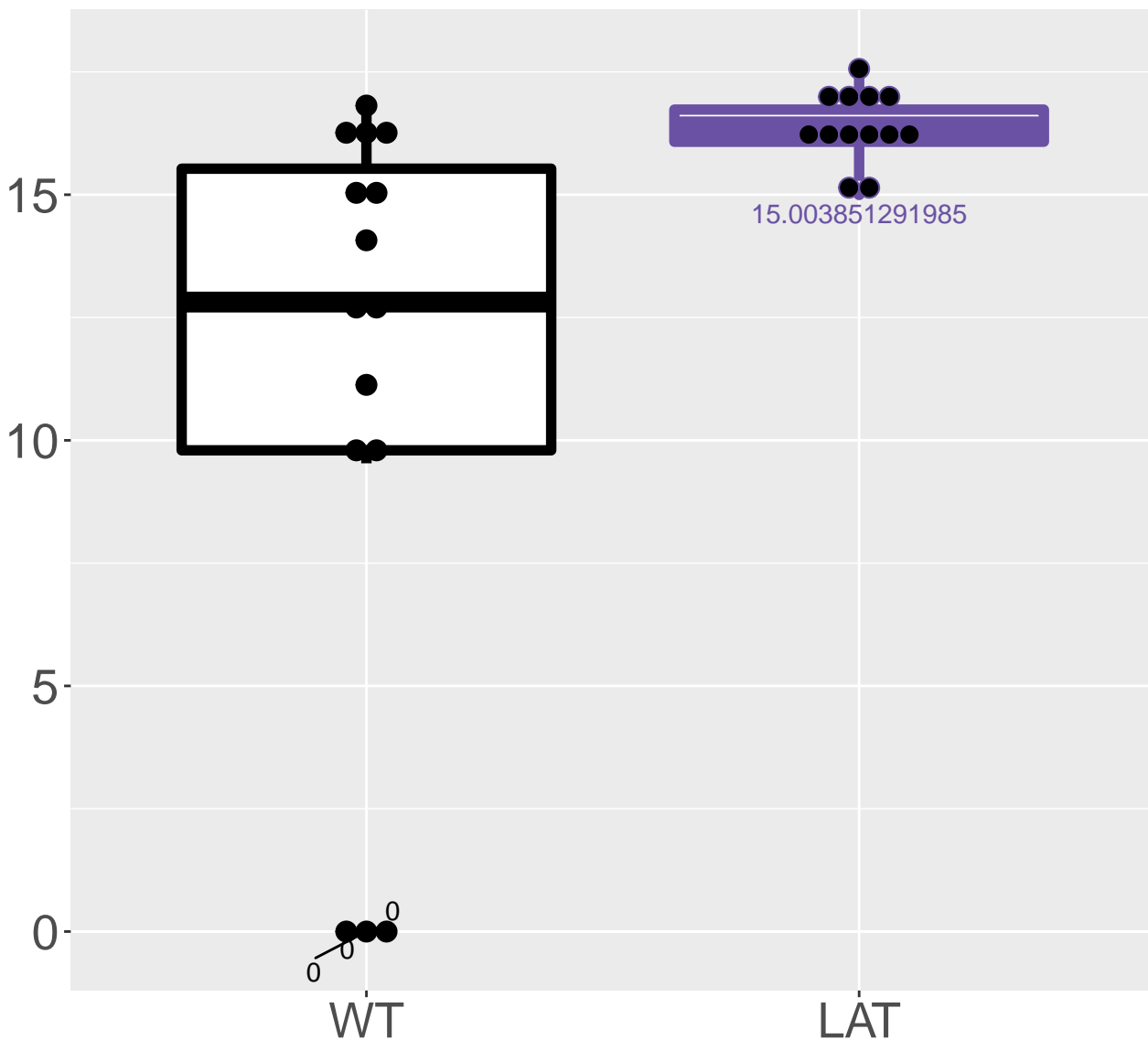
**M300.0092T350.84**

**FDR = 0.018, FC = -0.56**



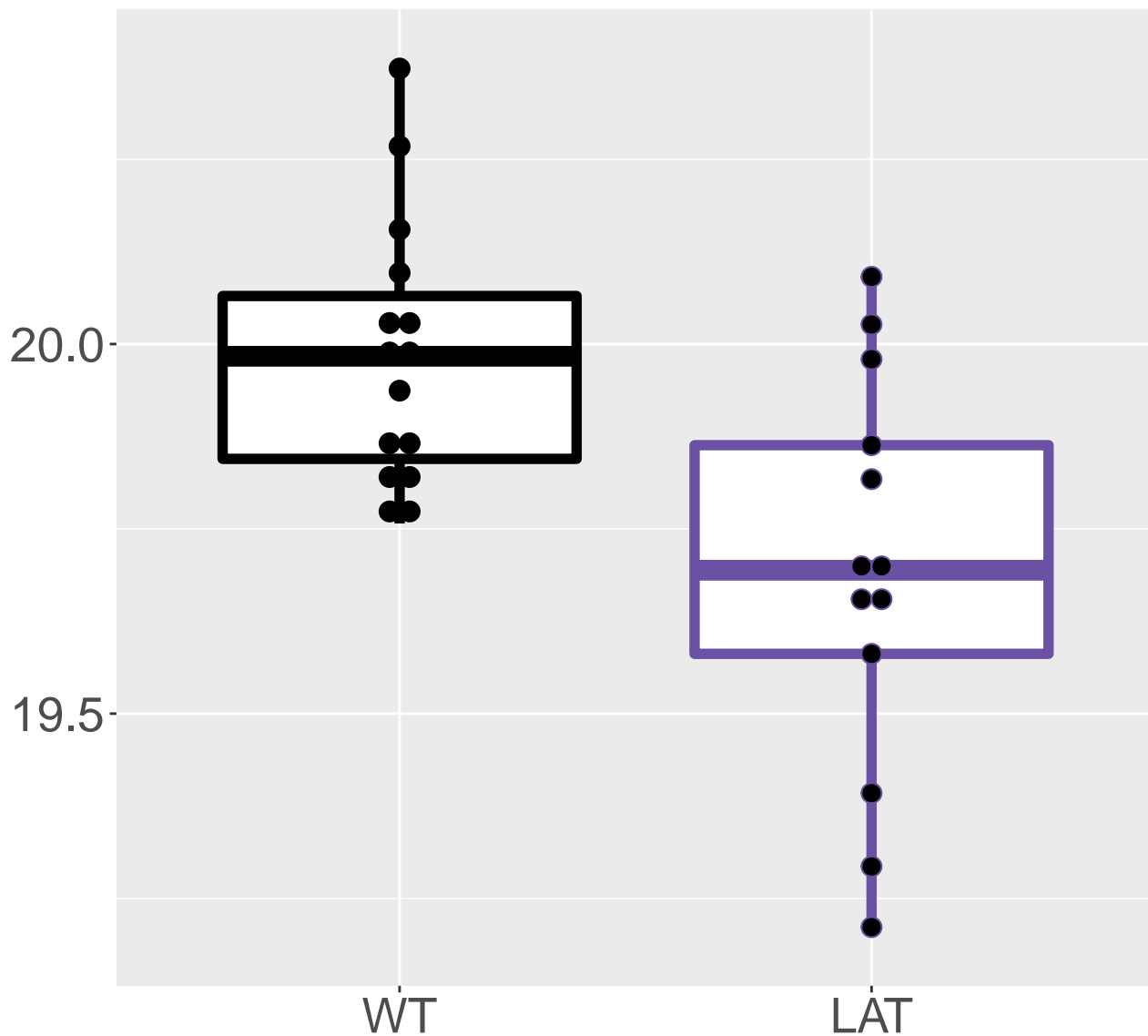
**M716.6772T574.26\_1**

**FDR = 0.018, FC = 5.3**

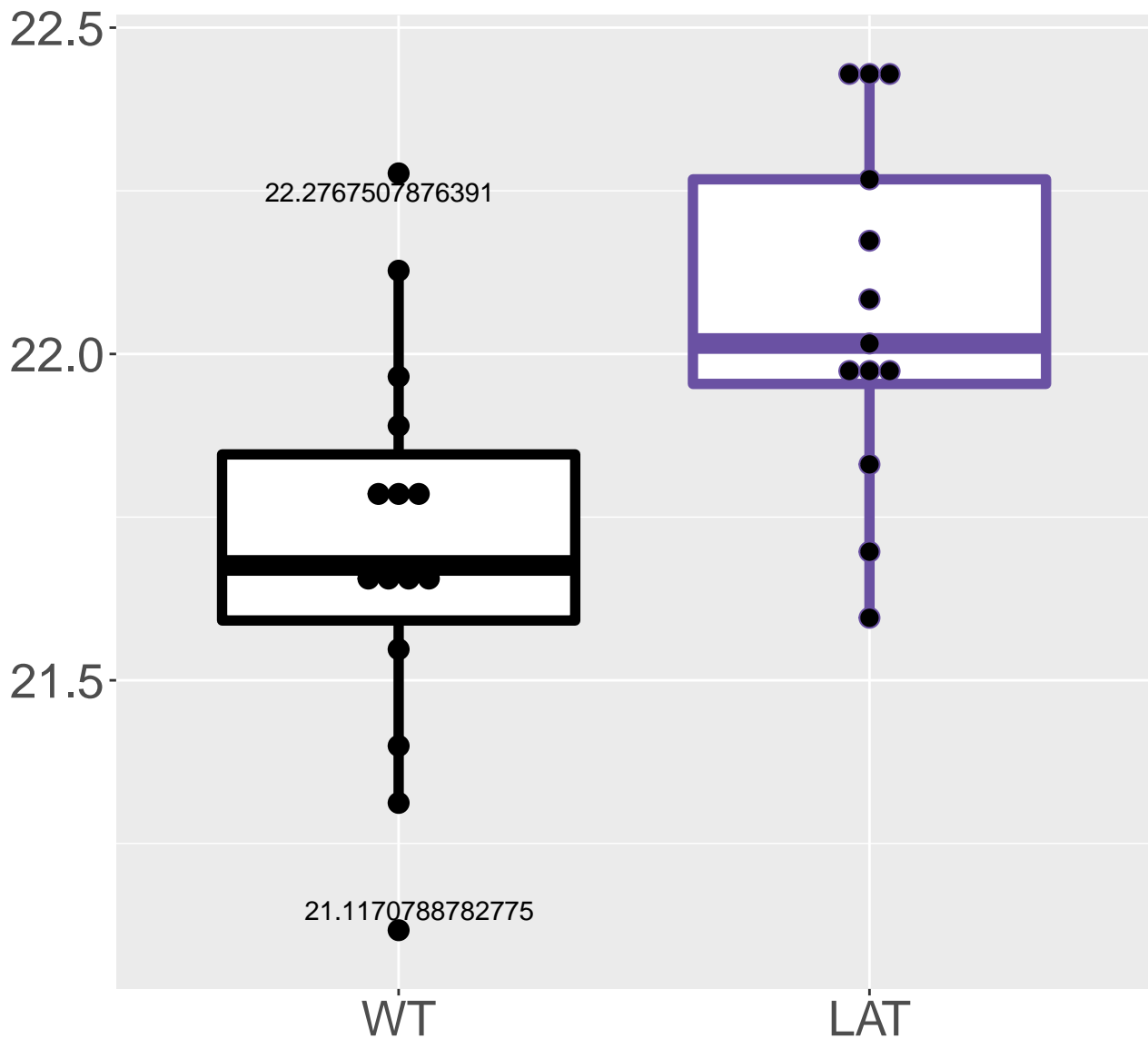


**M602.1429T568.04**

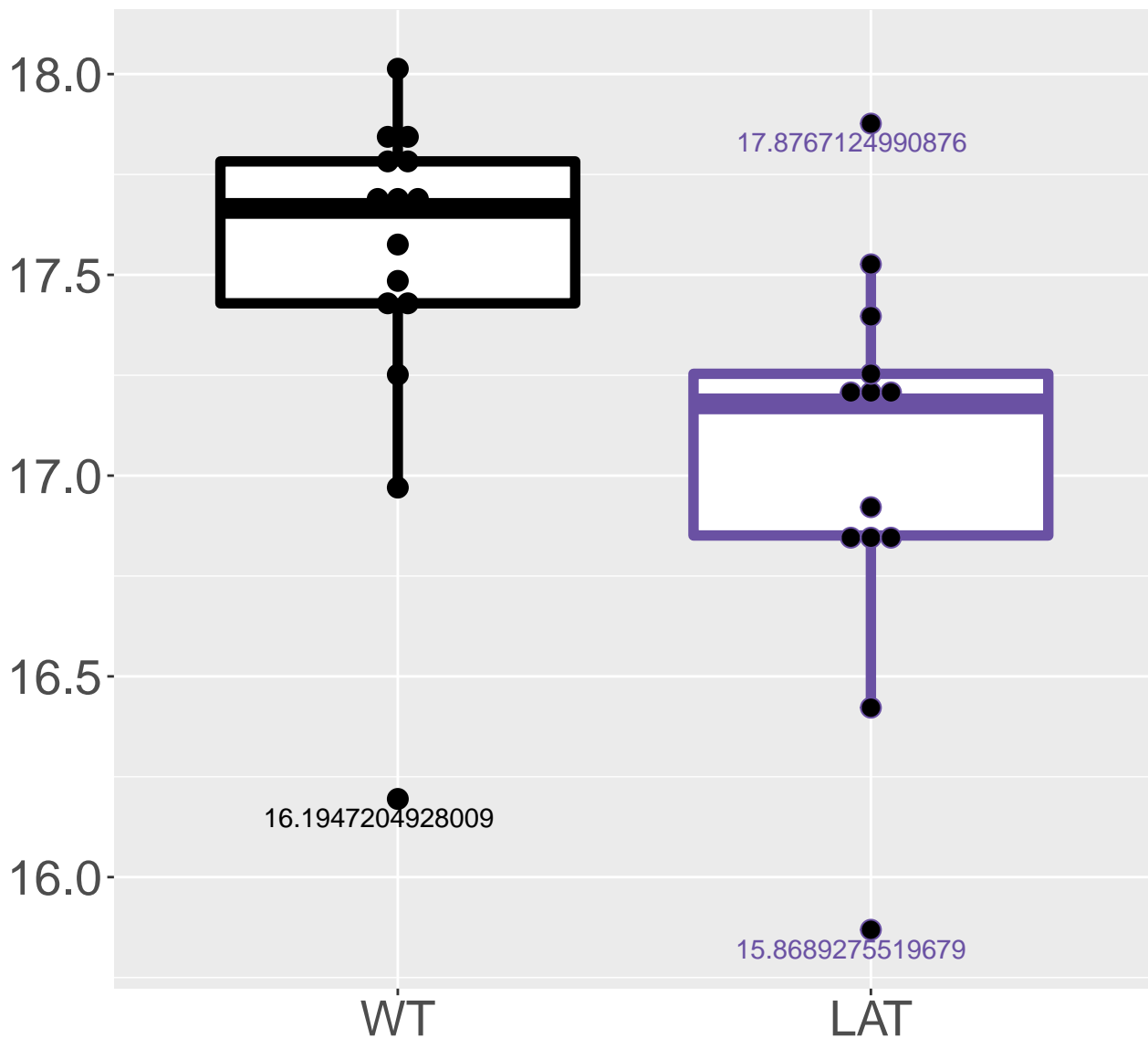
**FDR = 0.018, FC = -0.3**



**M306.0868T443.94**  
**FDR = 0.018, FC = 0.36**



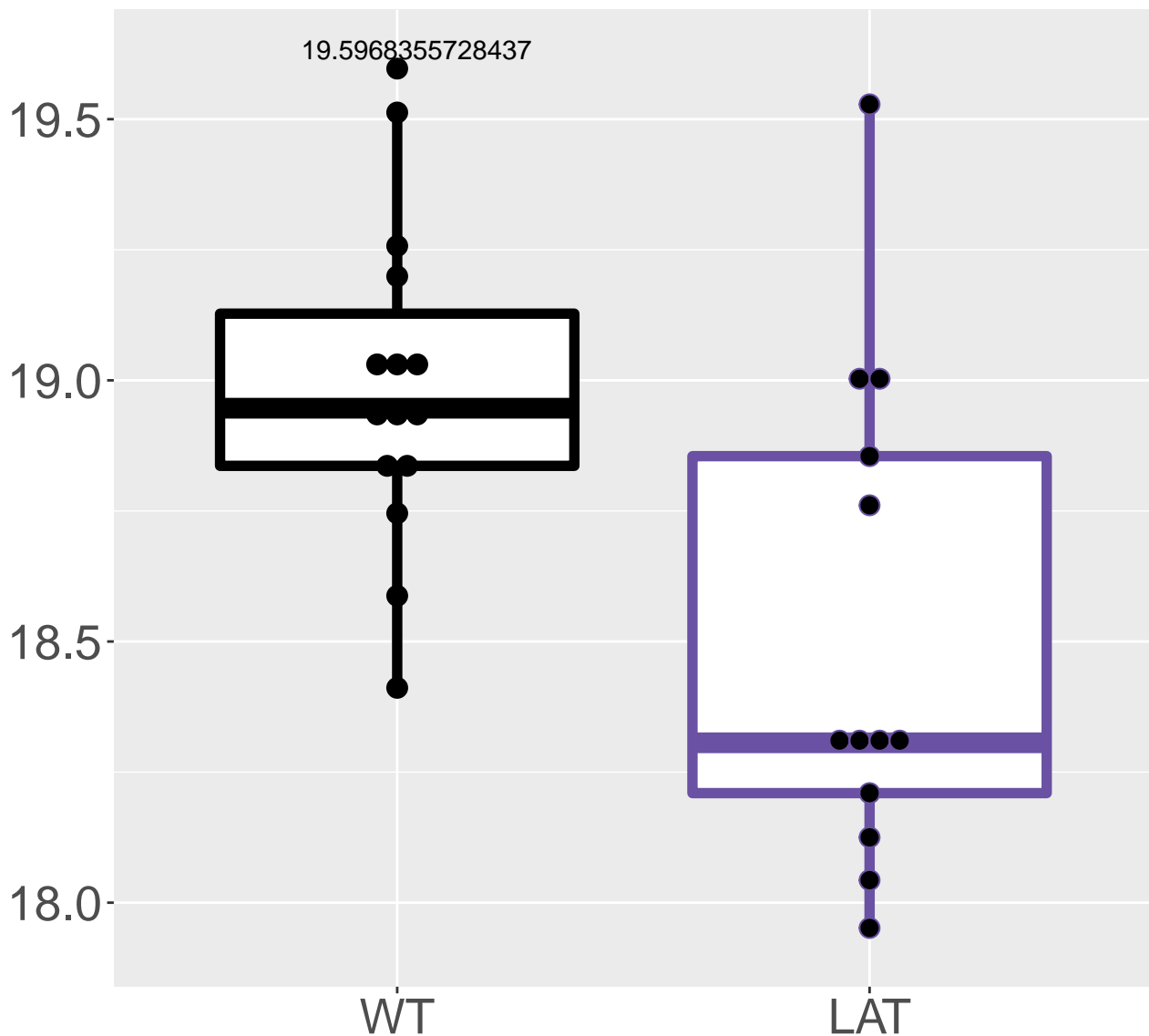
**M467.1346T418.63**  
**FDR = 0.019, FC = -0.48**





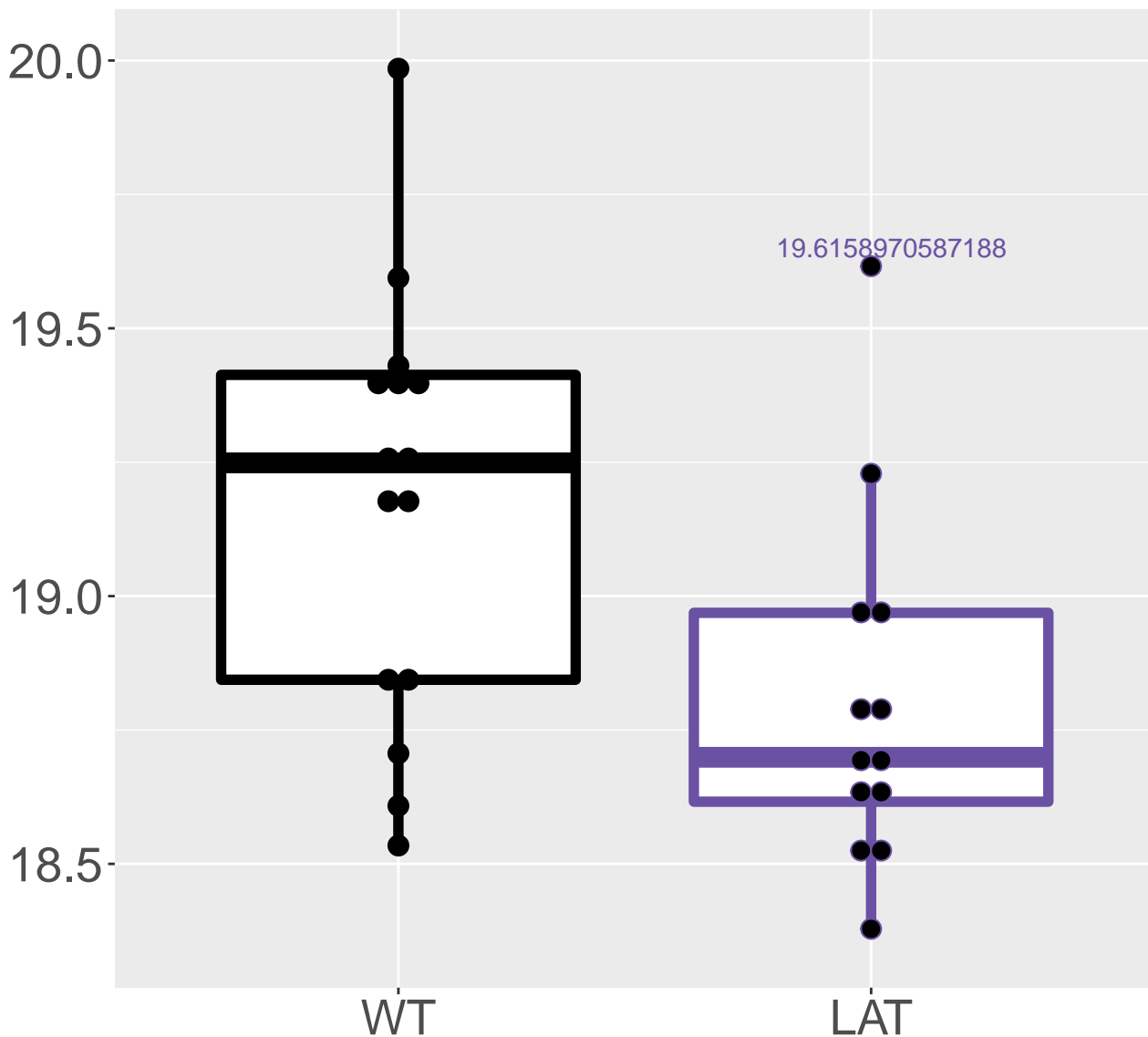
**M251.0776T578.26**

**FDR = 0.019, FC = -0.48**



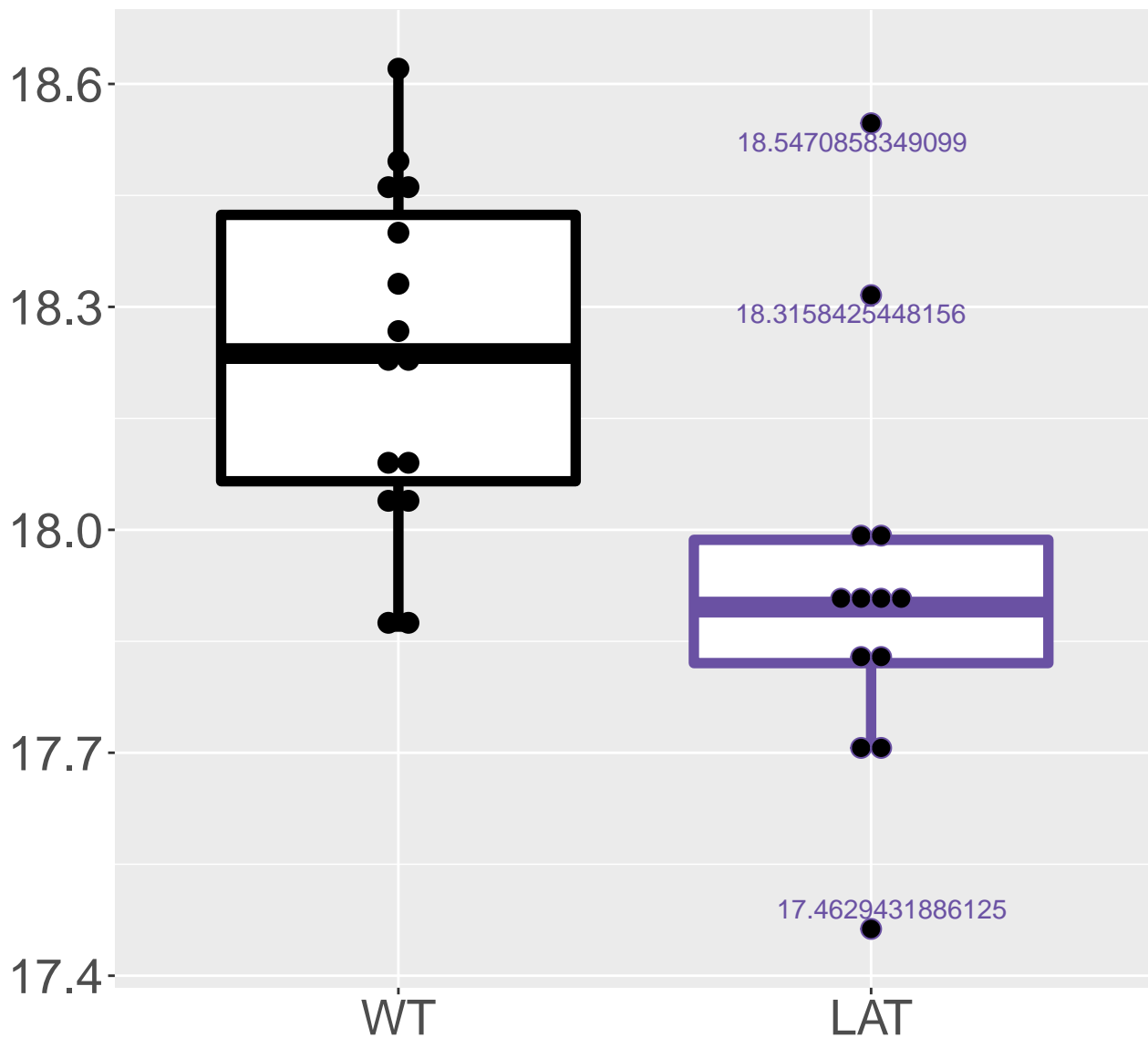
**M272.0892T522.06**

**FDR = 0.019, FC = -0.37**

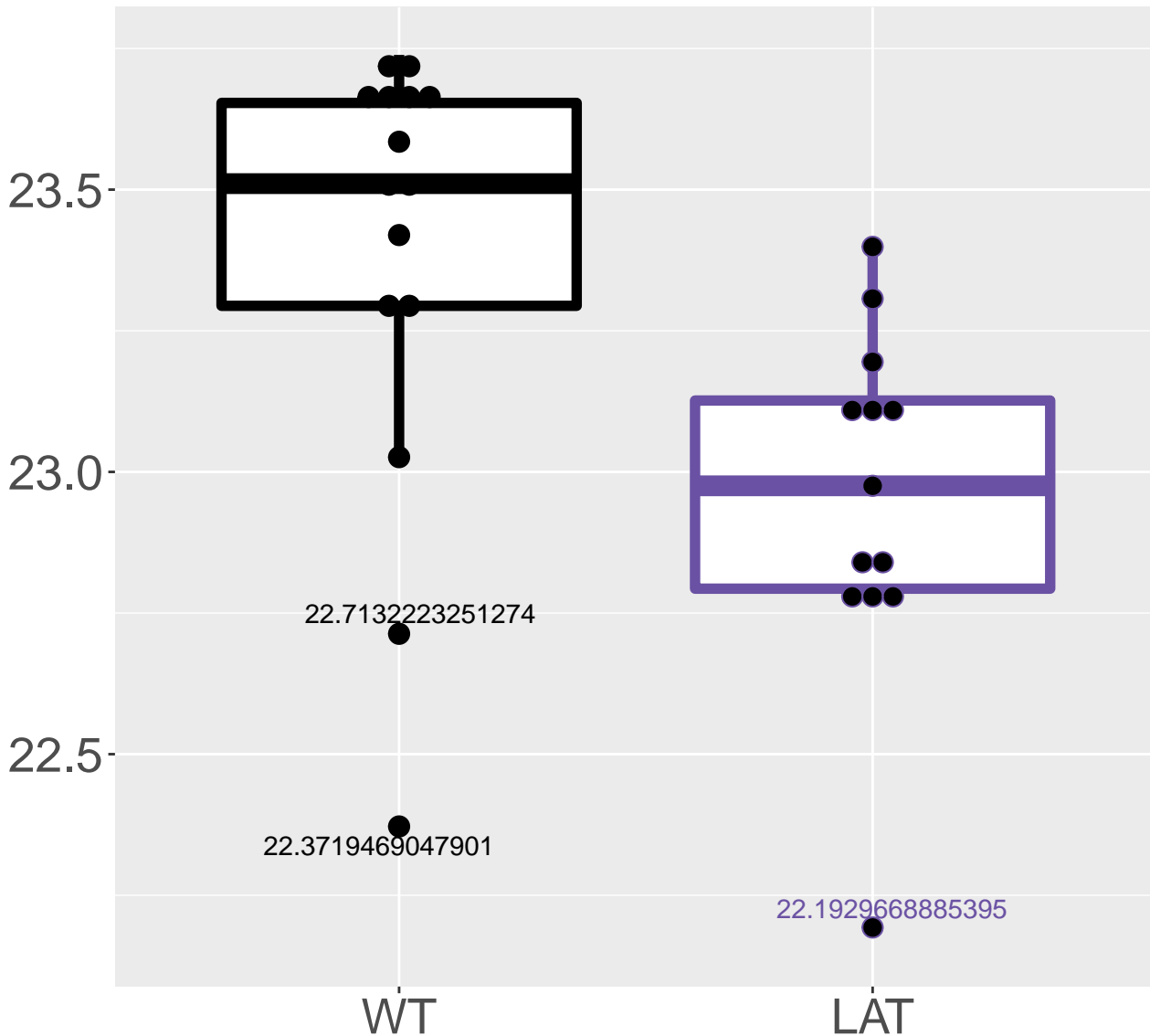


**M278.0212T78.3\_1**

**FDR = 0.019, FC = -0.31**

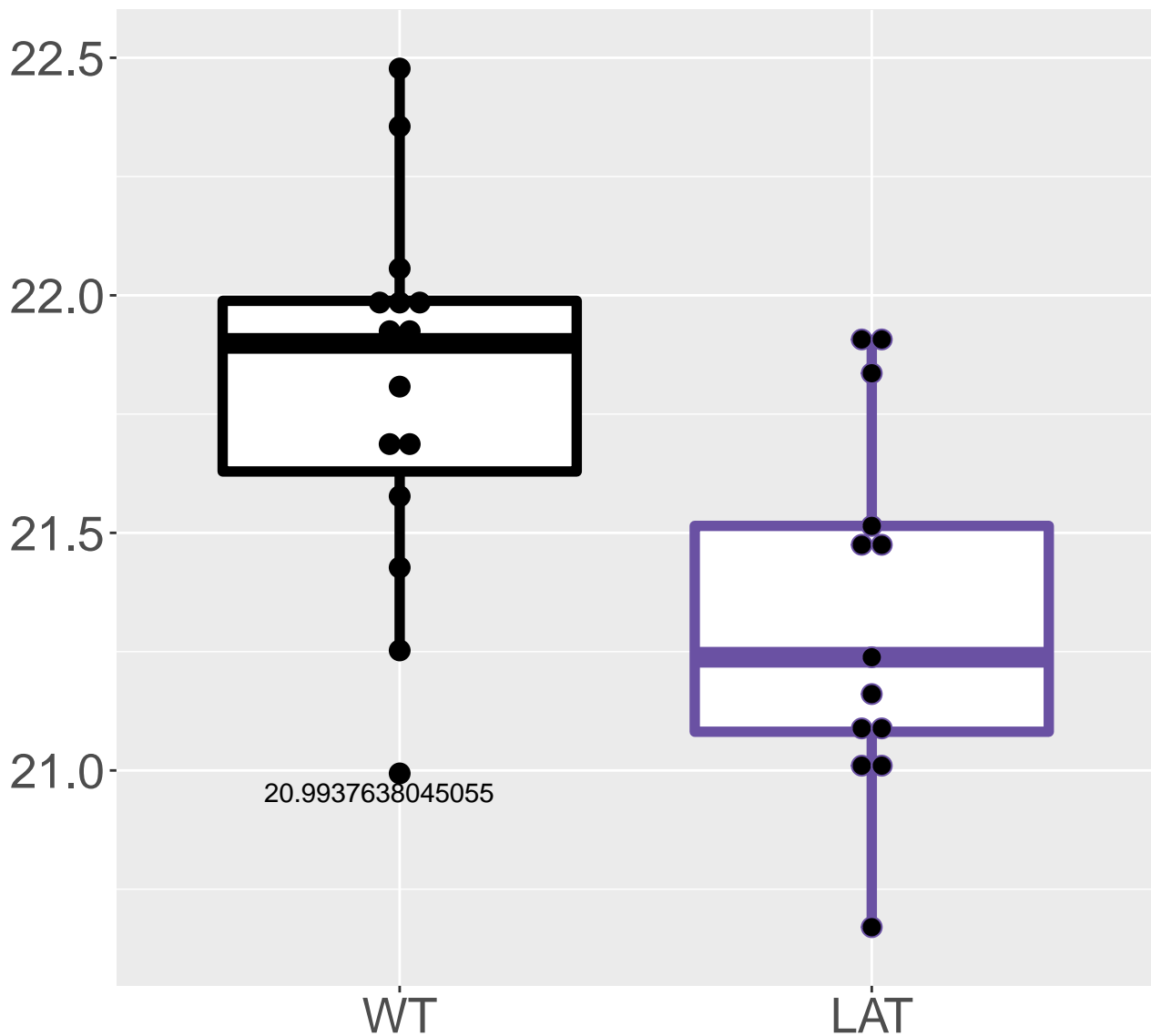


**Tryptophan|L-Tryptophan**  
**FDR = 0.019, FC = -0.43**

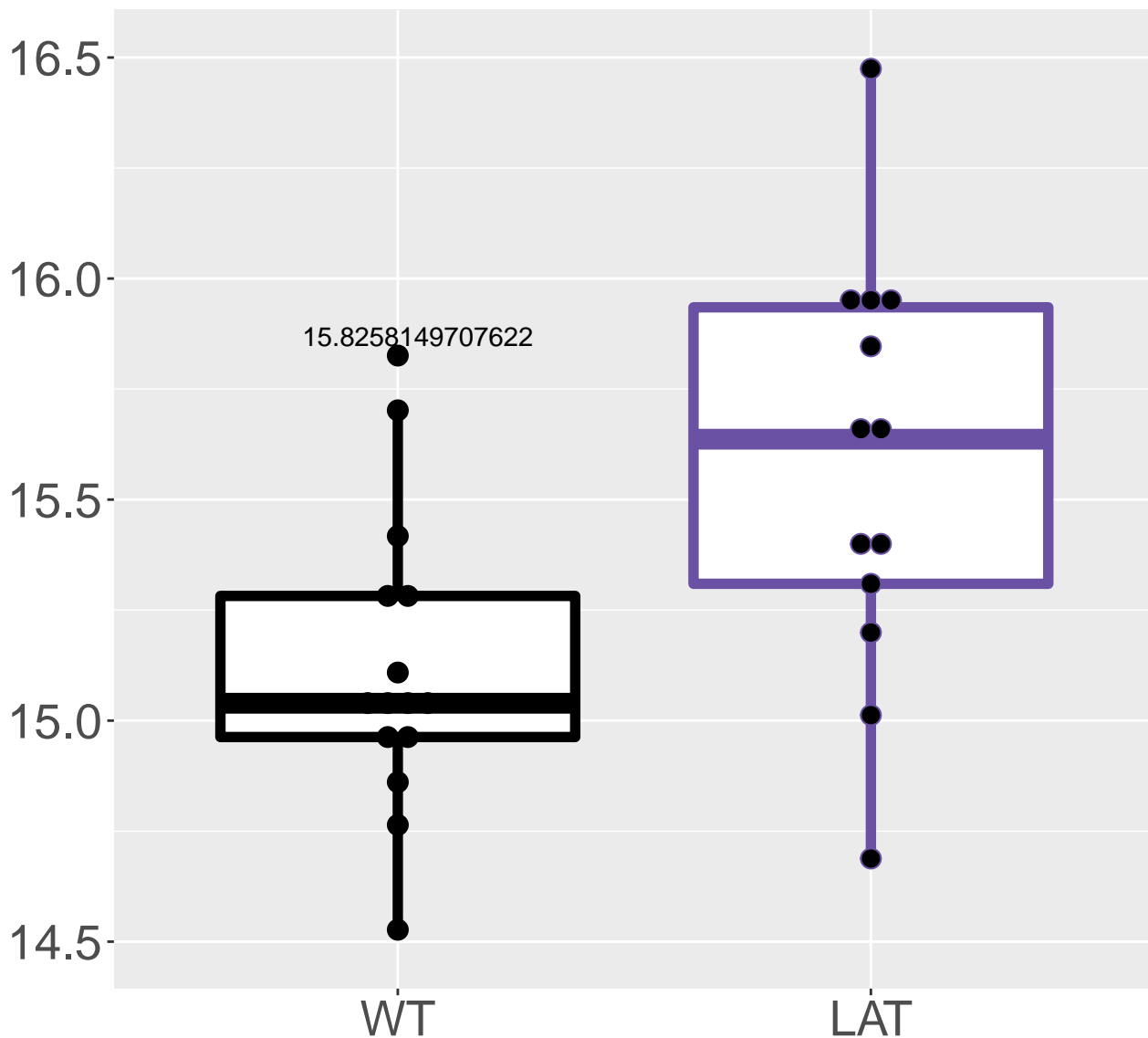


**M132.0126T180.03**

**FDR = 0.019, FC = -0.47**

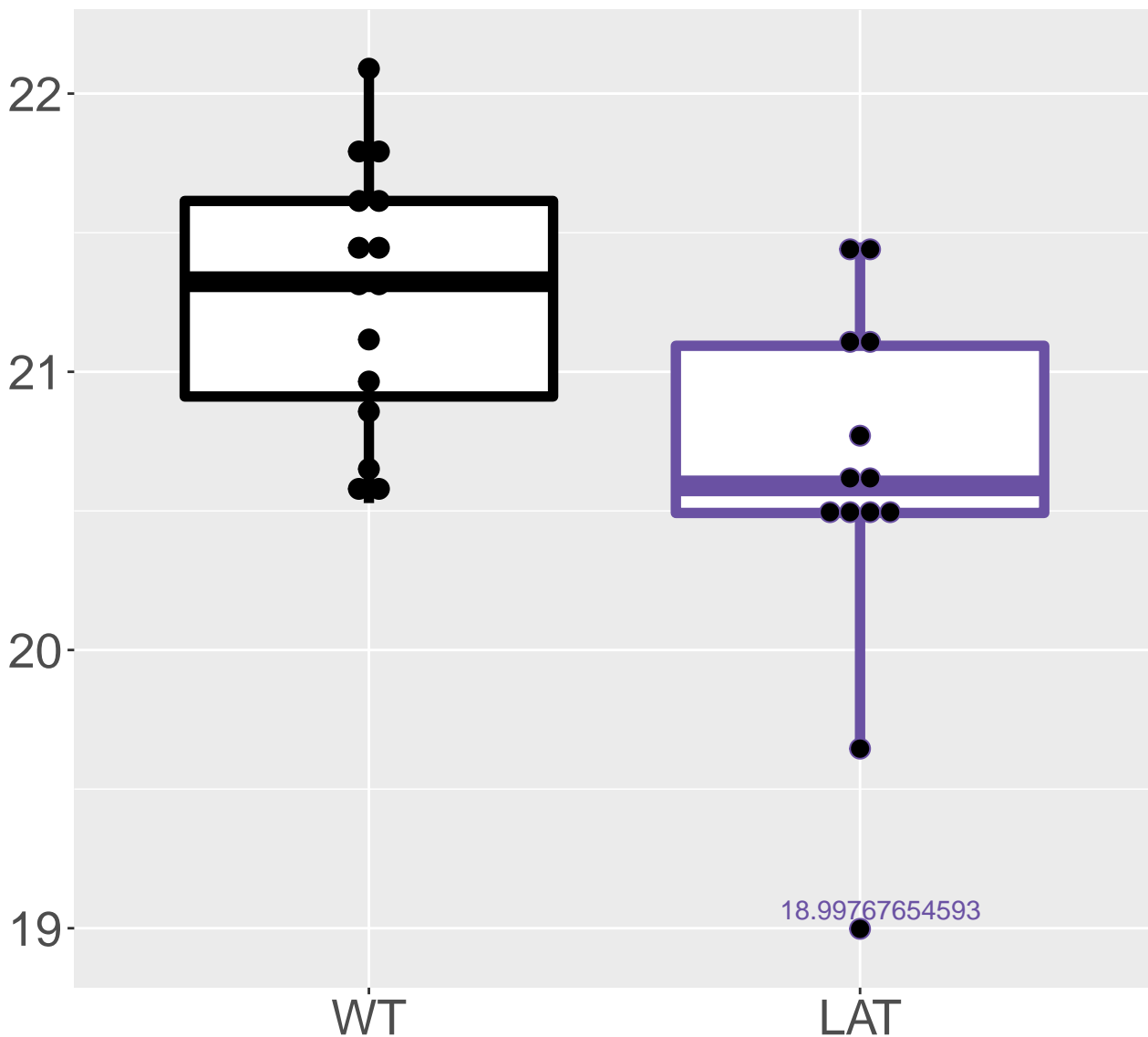


**M455.0817T544.26**  
**FDR = 0.019, FC = 0.46**

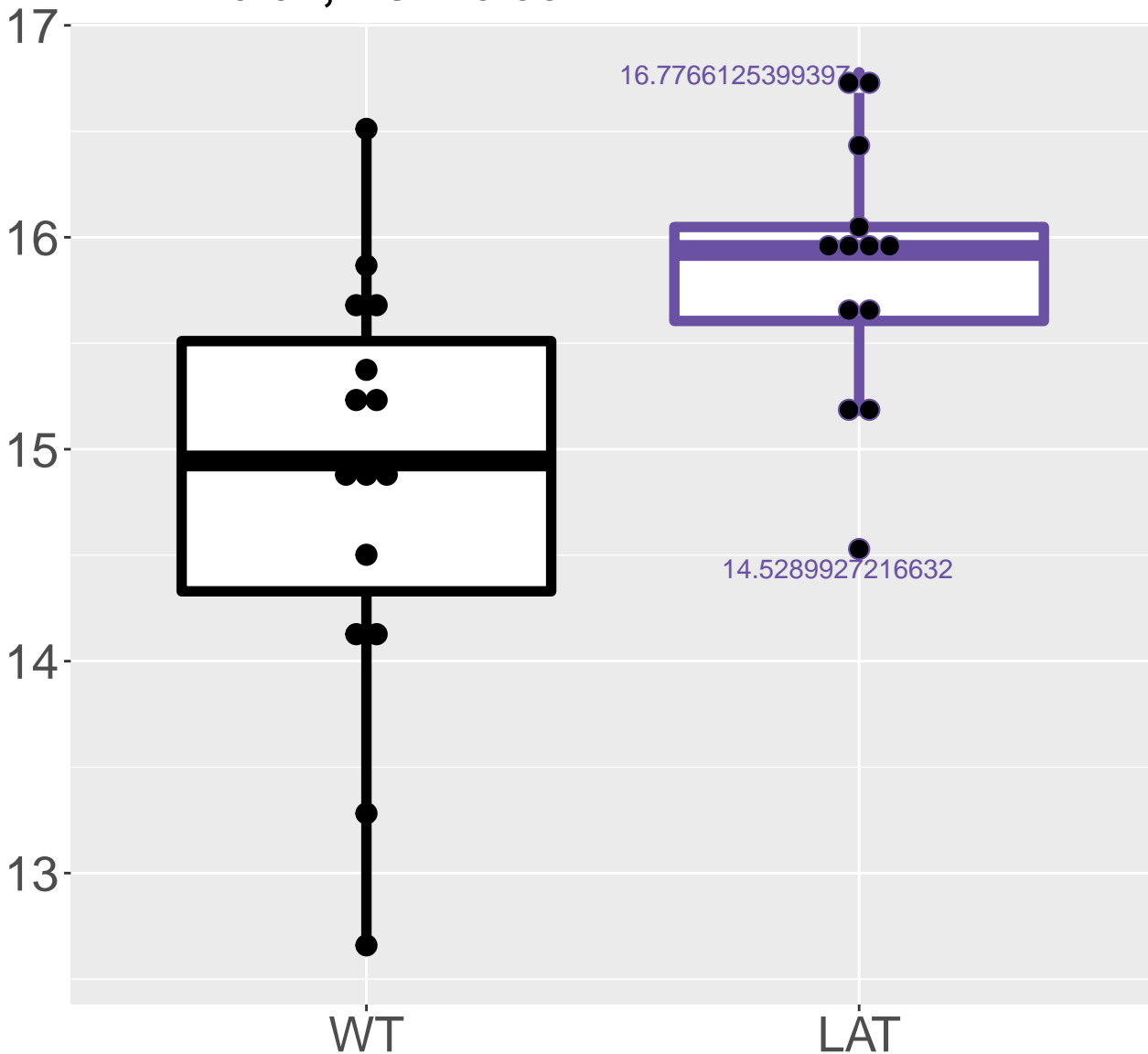


**M536.2095T244.66**

**FDR = 0.02, FC = -0.68**

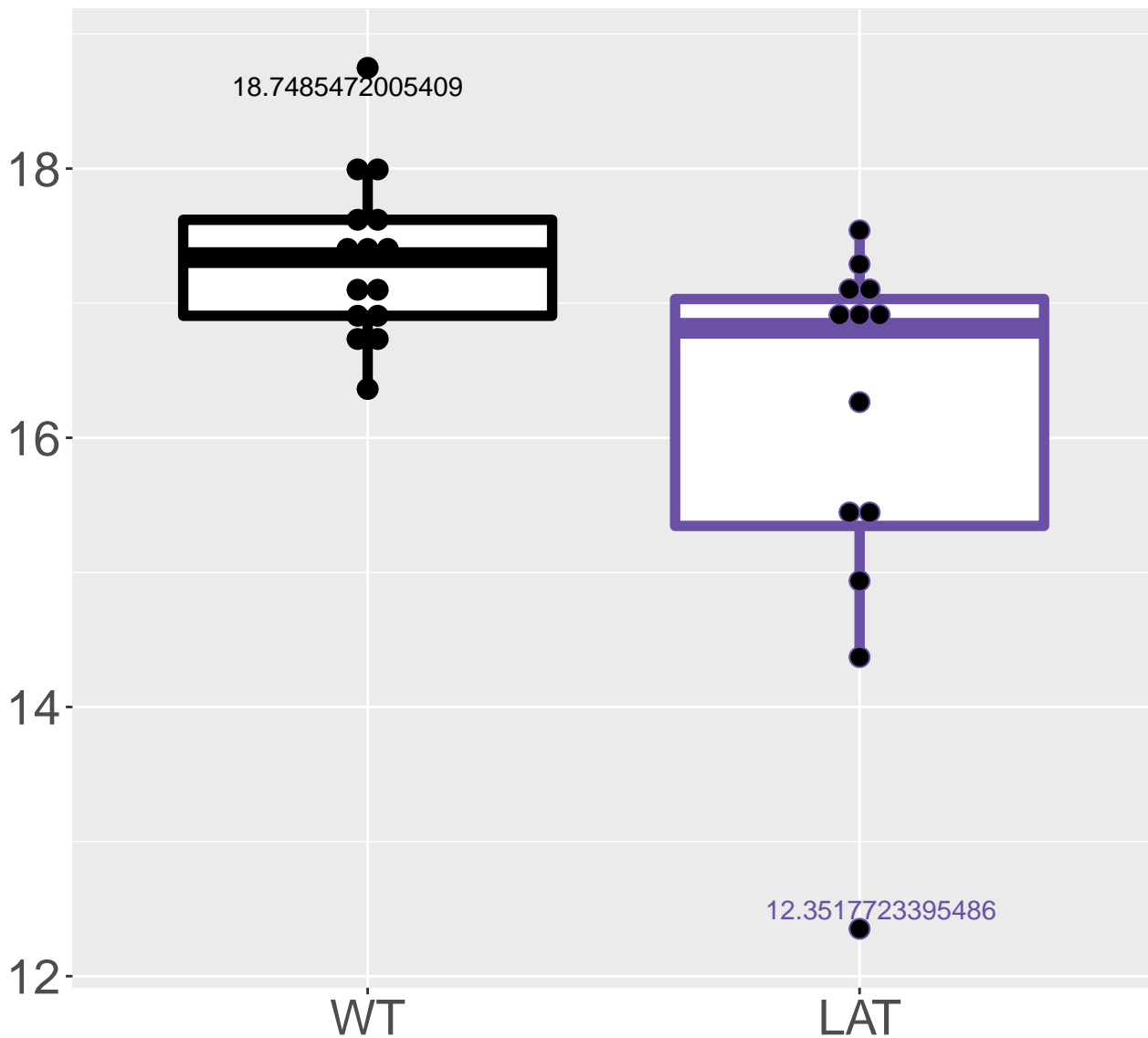


**M788.1709T587.15\_2**  
**FDR = 0.02, FC = 0.99**



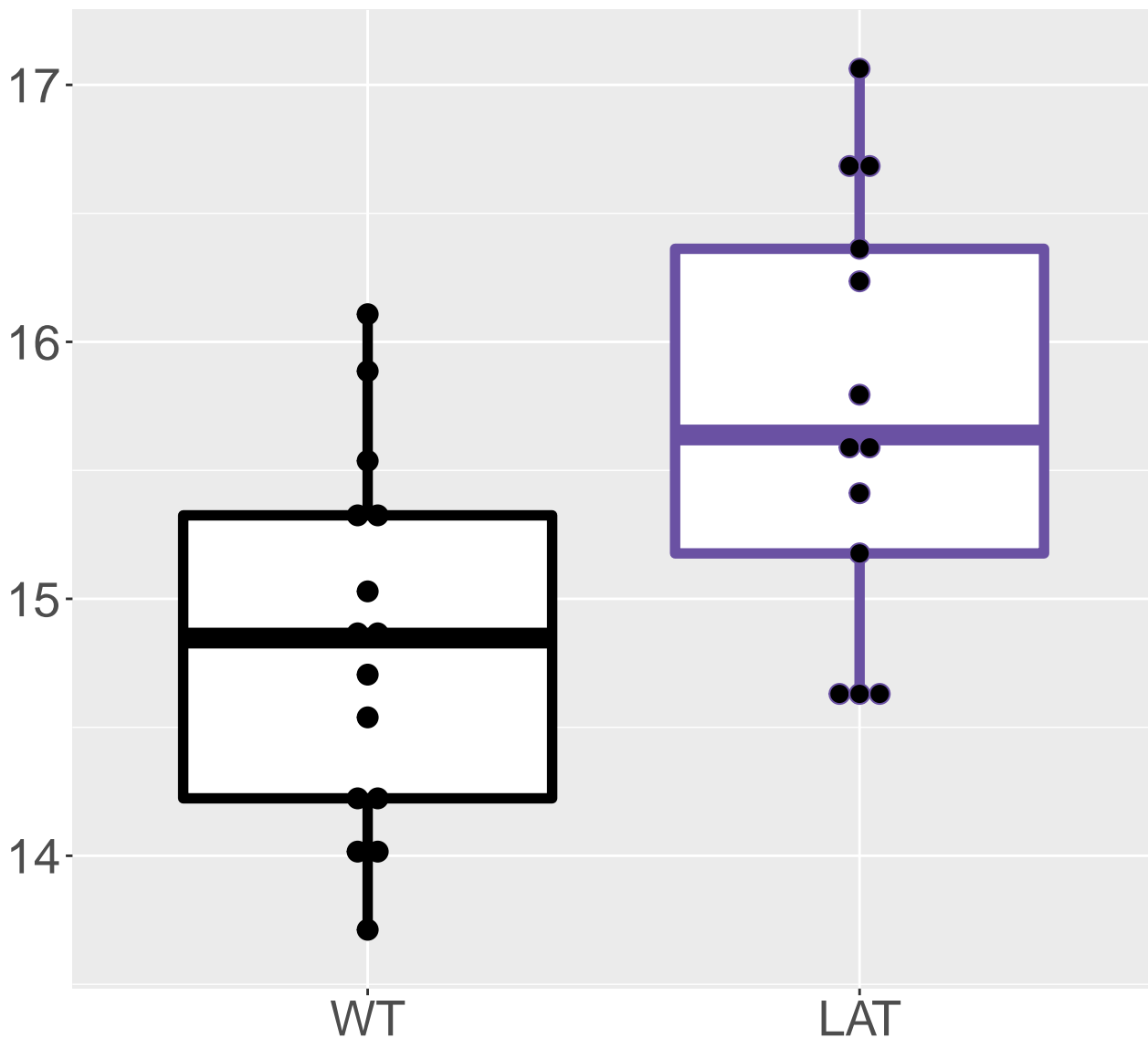


**M174.0157T170.05**  
**FDR = 0.02, FC = -1.3**



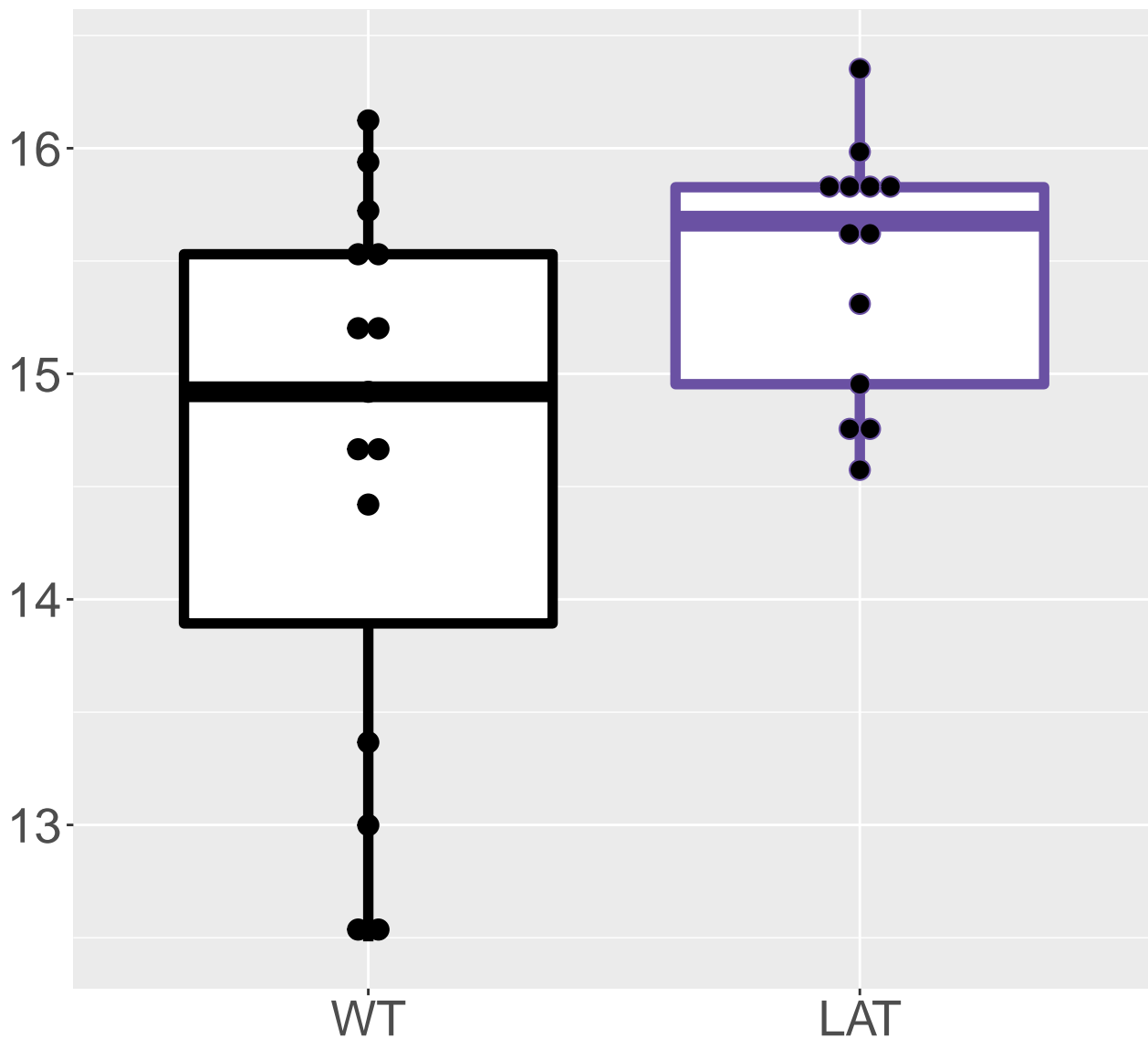
**M496.6023T540.98**

**FDR = 0.02, FC = 0.9**



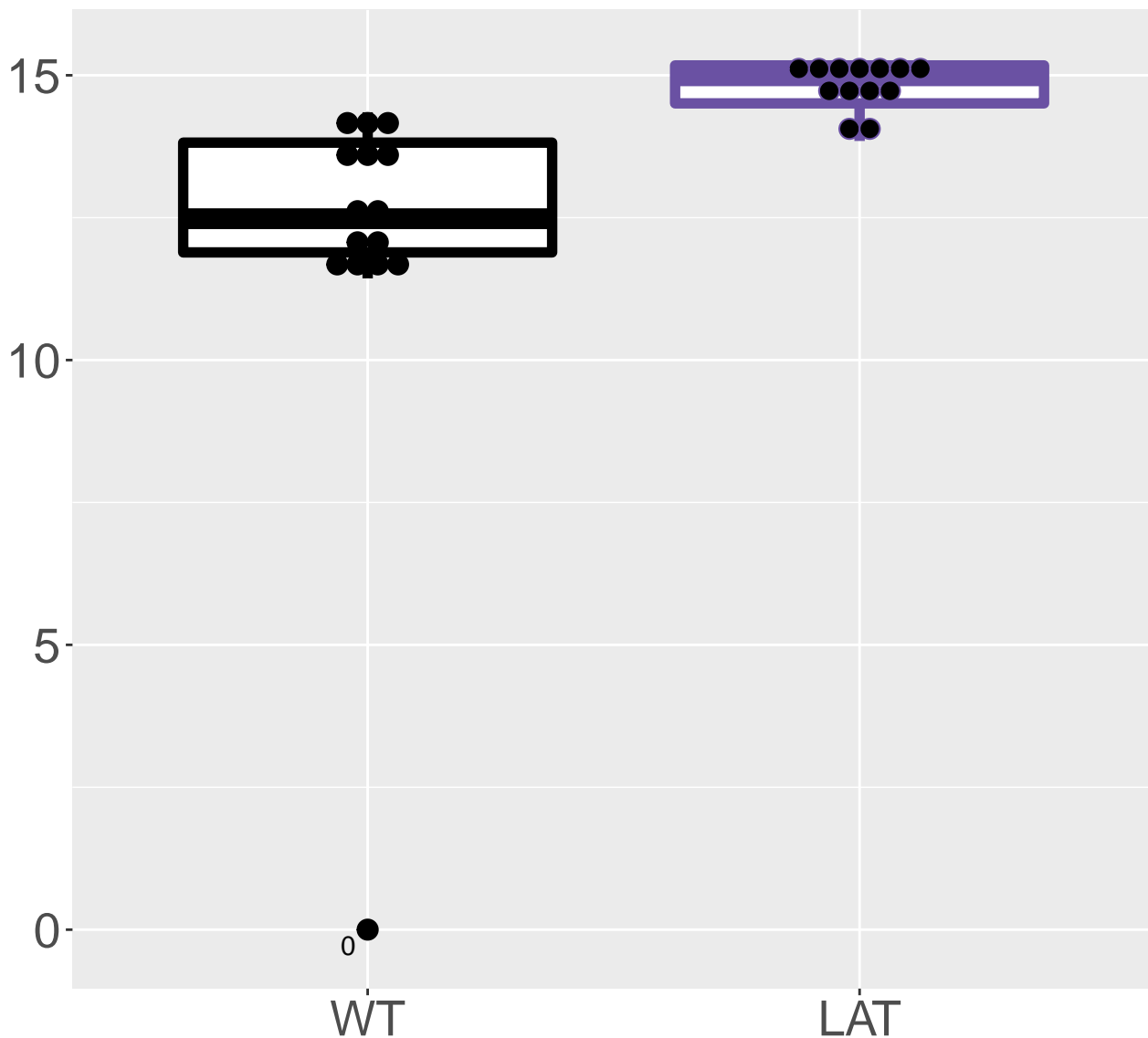
**M383.0771T541.73**

**FDR = 0.02, FC = 0.86, sex\***



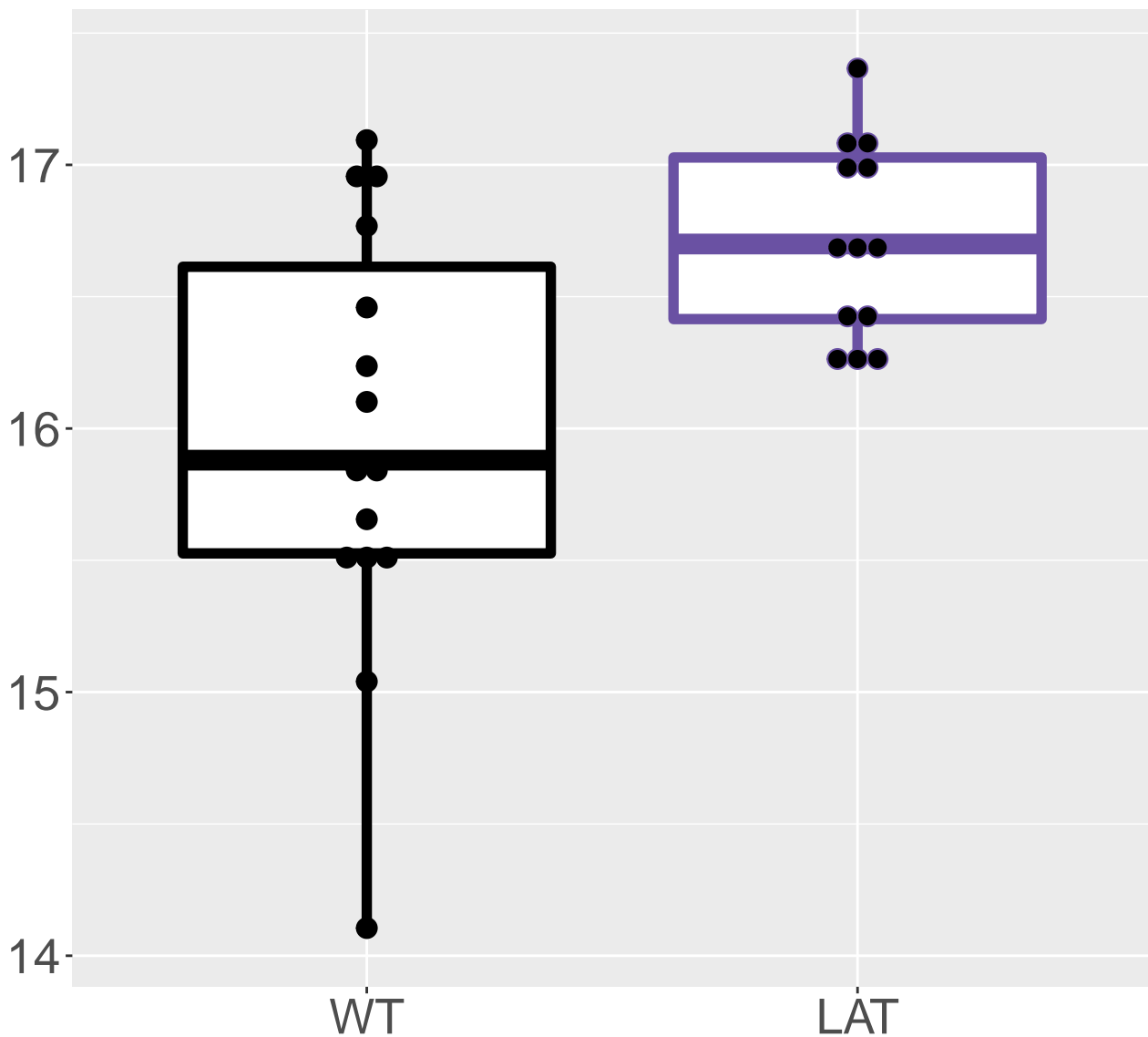
**M740.188T628.42**

**FDR = 0.02, FC = 2.9**



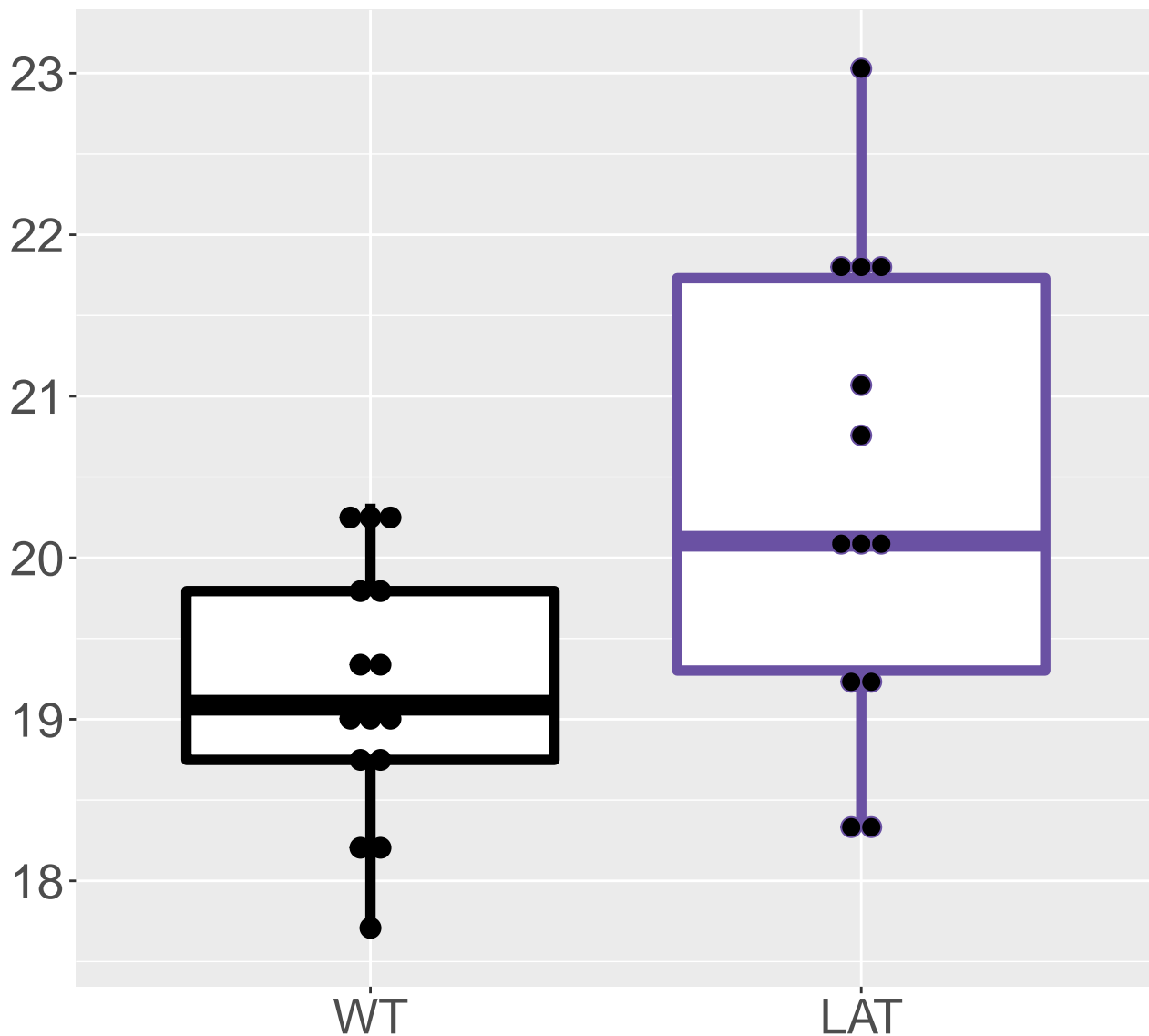
**M228.5862T503.8**

**FDR = 0.02, FC = 0.74**

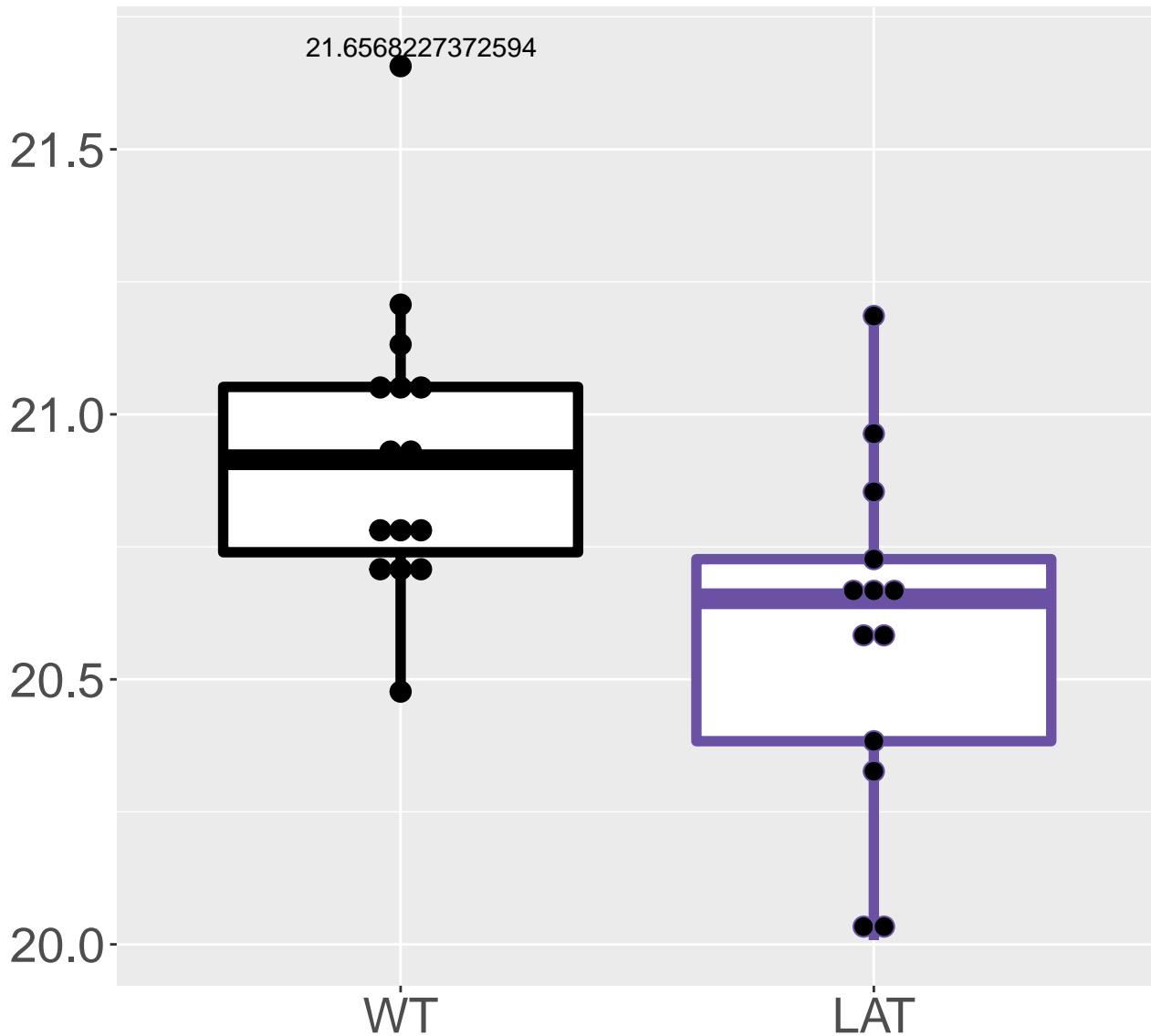


**M112.9374T699.03**

**FDR = 0.02, FC = 1.3**

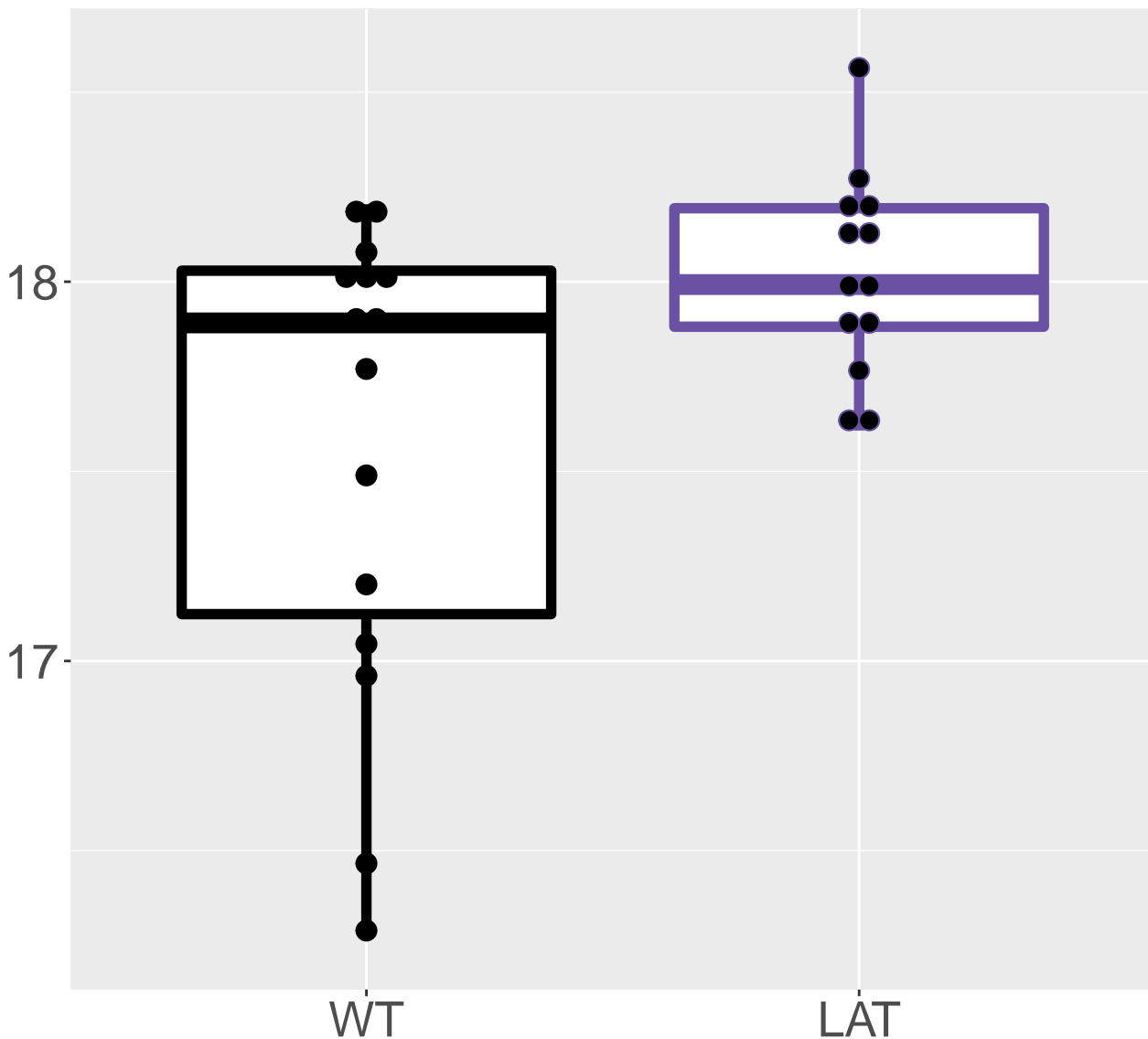


**M189.0406T307.03**  
**FDR = 0.02, FC = -0.34**



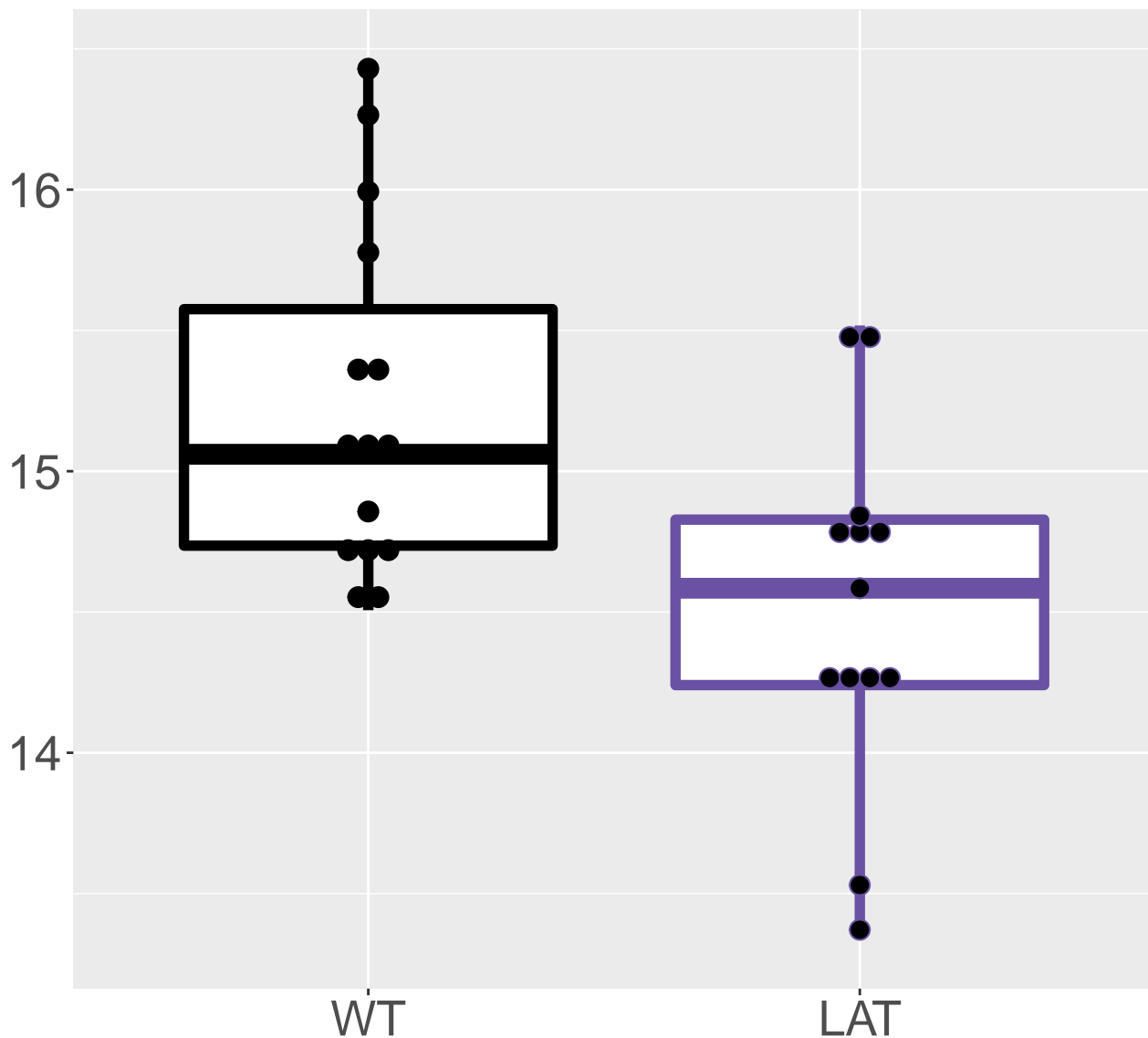
**M175.025T499.17**

**FDR = 0.02, FC = 0.45, sex\***



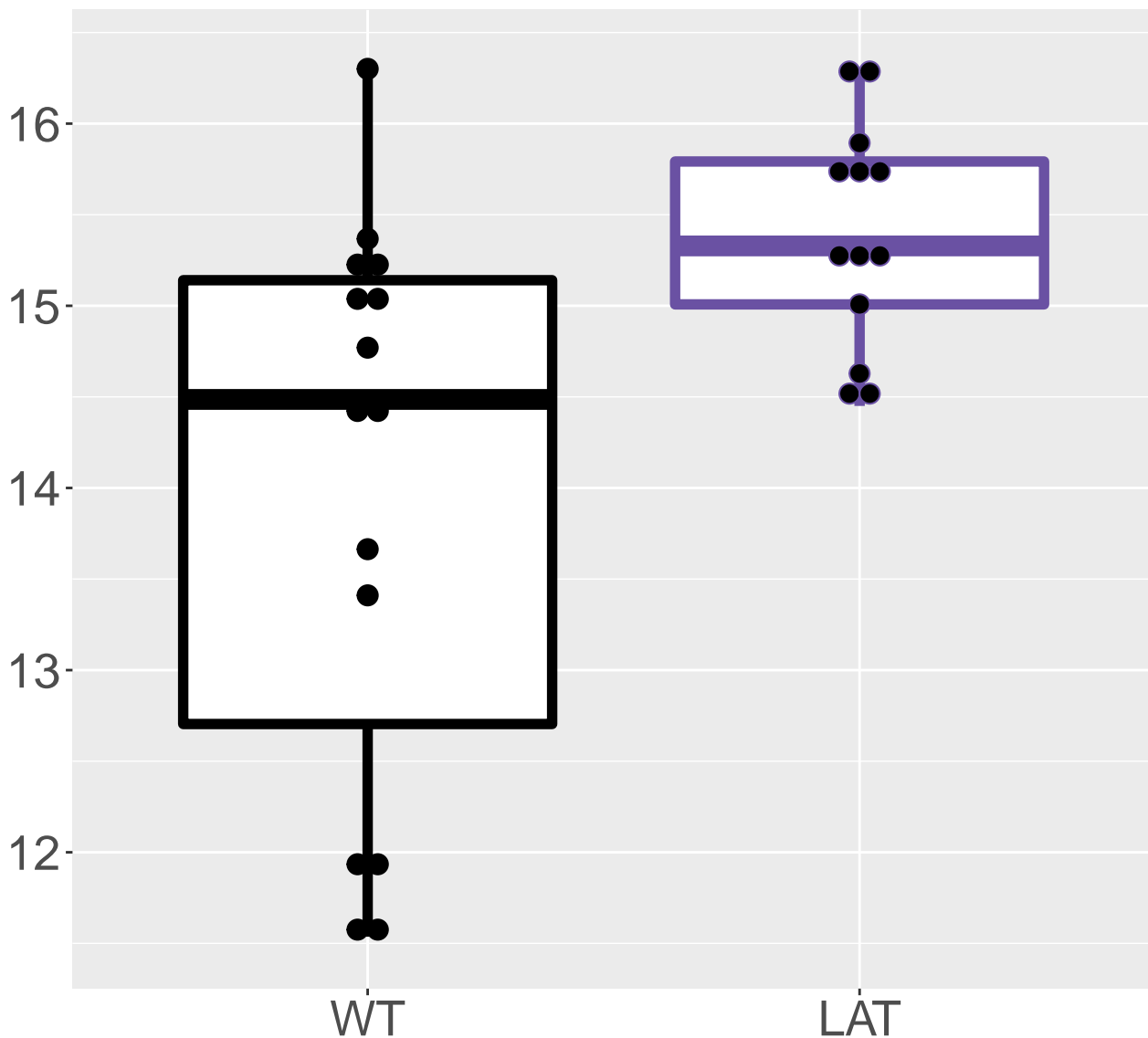


**M328.1174T211.09**  
**FDR = 0.02, FC = -0.72**

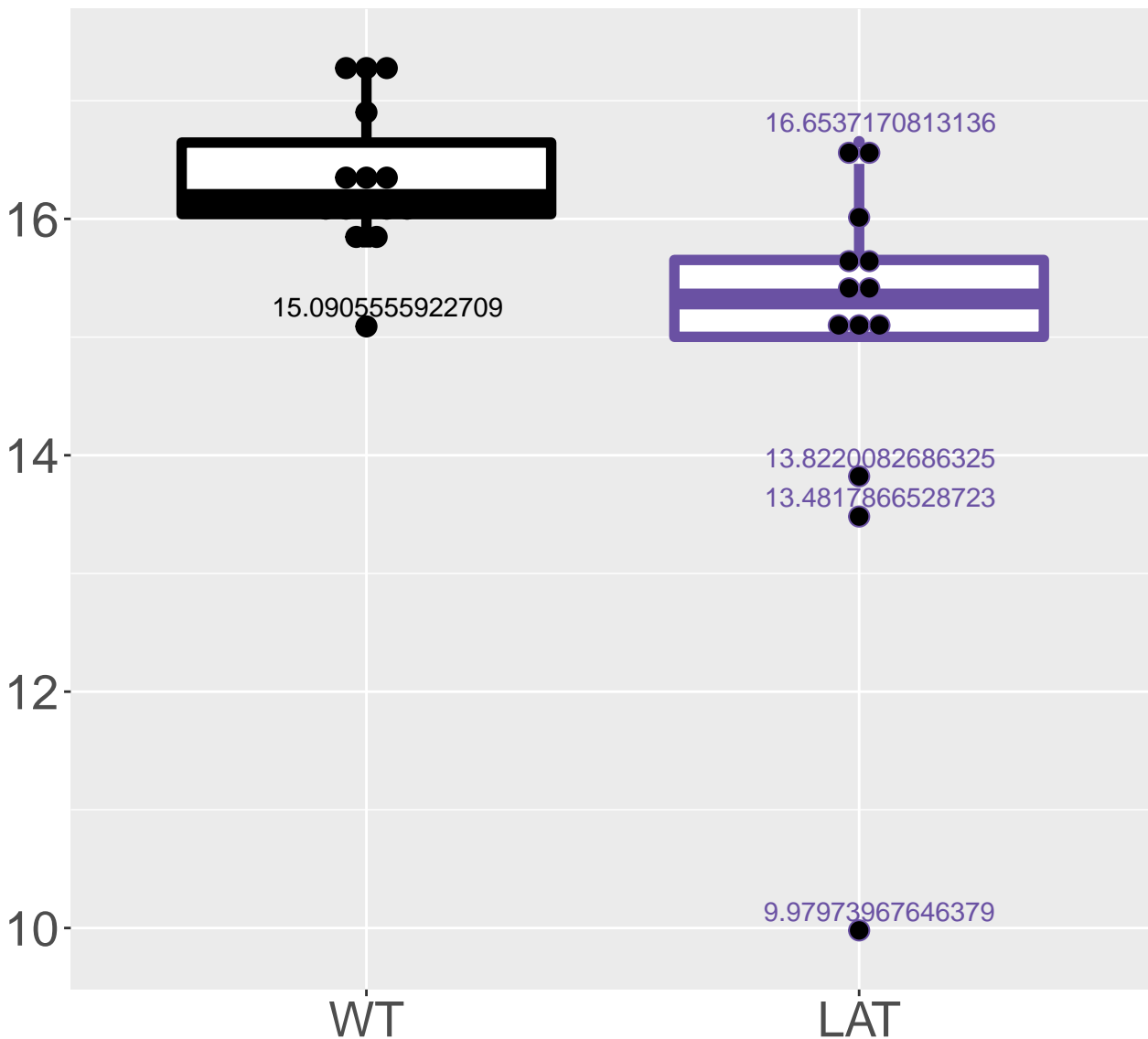


**M153.9855T593.32**

**FDR = 0.02, FC = 1.4**

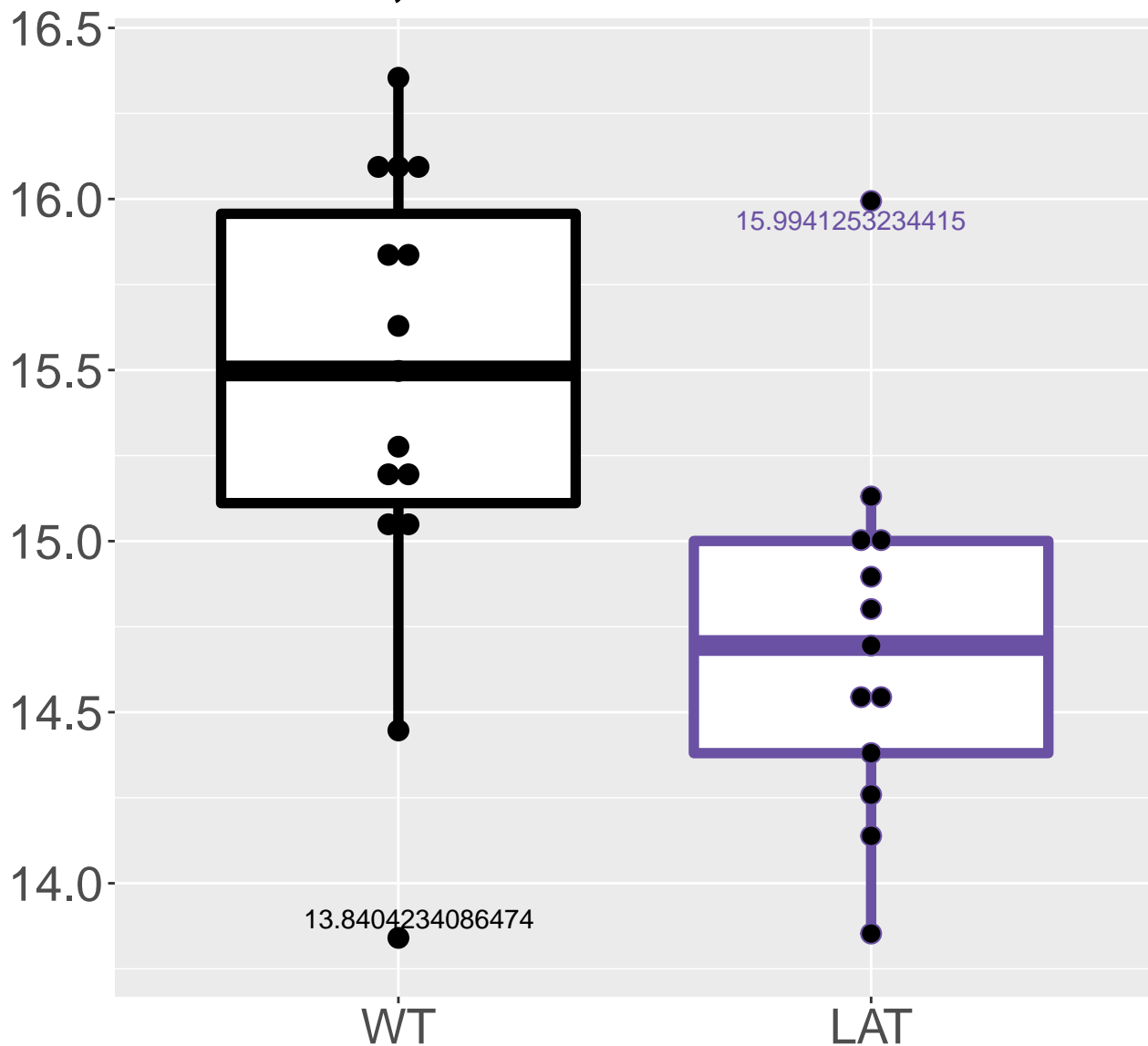


**FDR = 0.021, FC = -1.4**



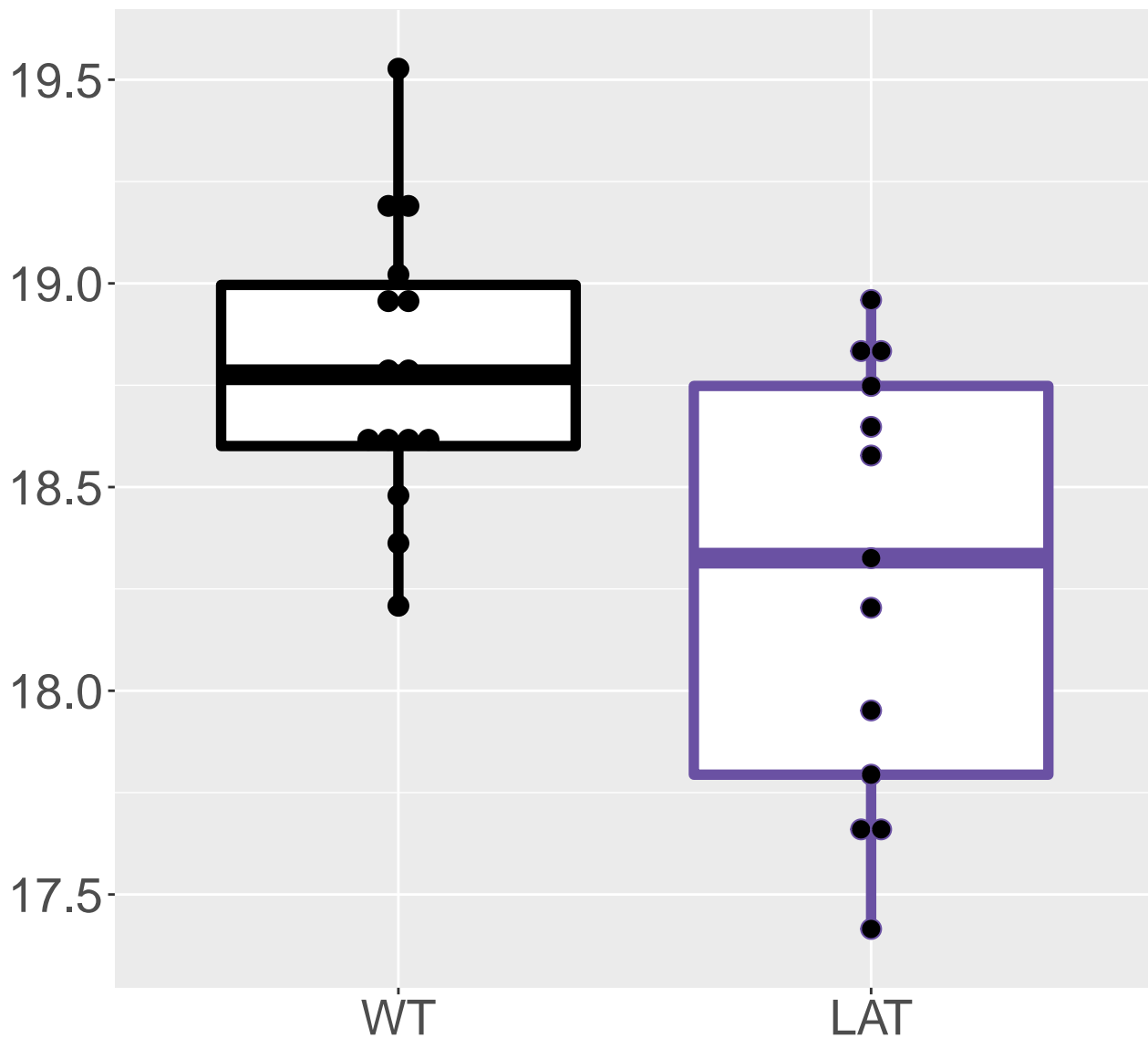
**M712.2247T607.81**

**FDR = 0.021, FC = -0.72**



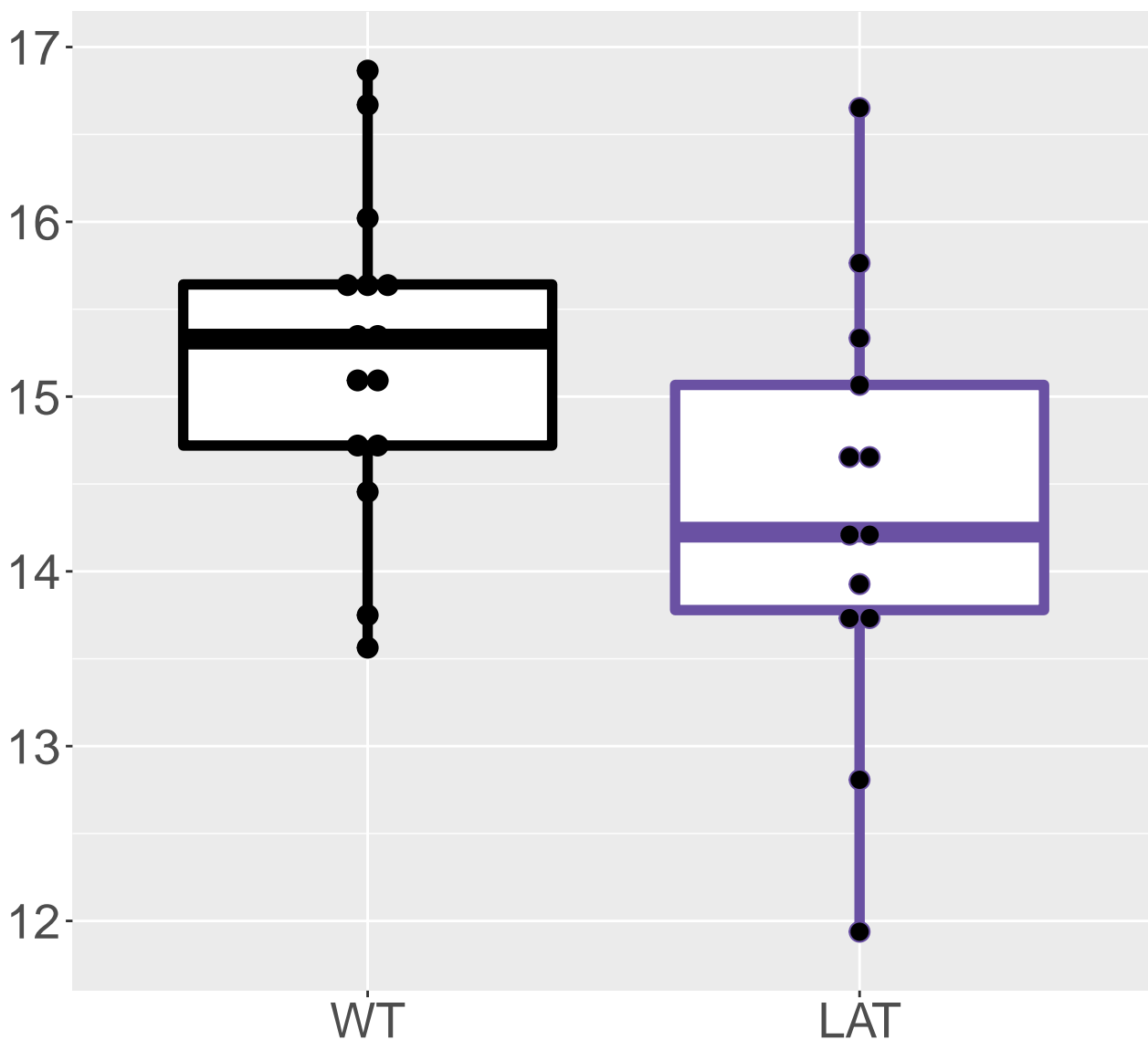
**M294.0836T561.57**

**FDR = 0.021, FC = -0.52**

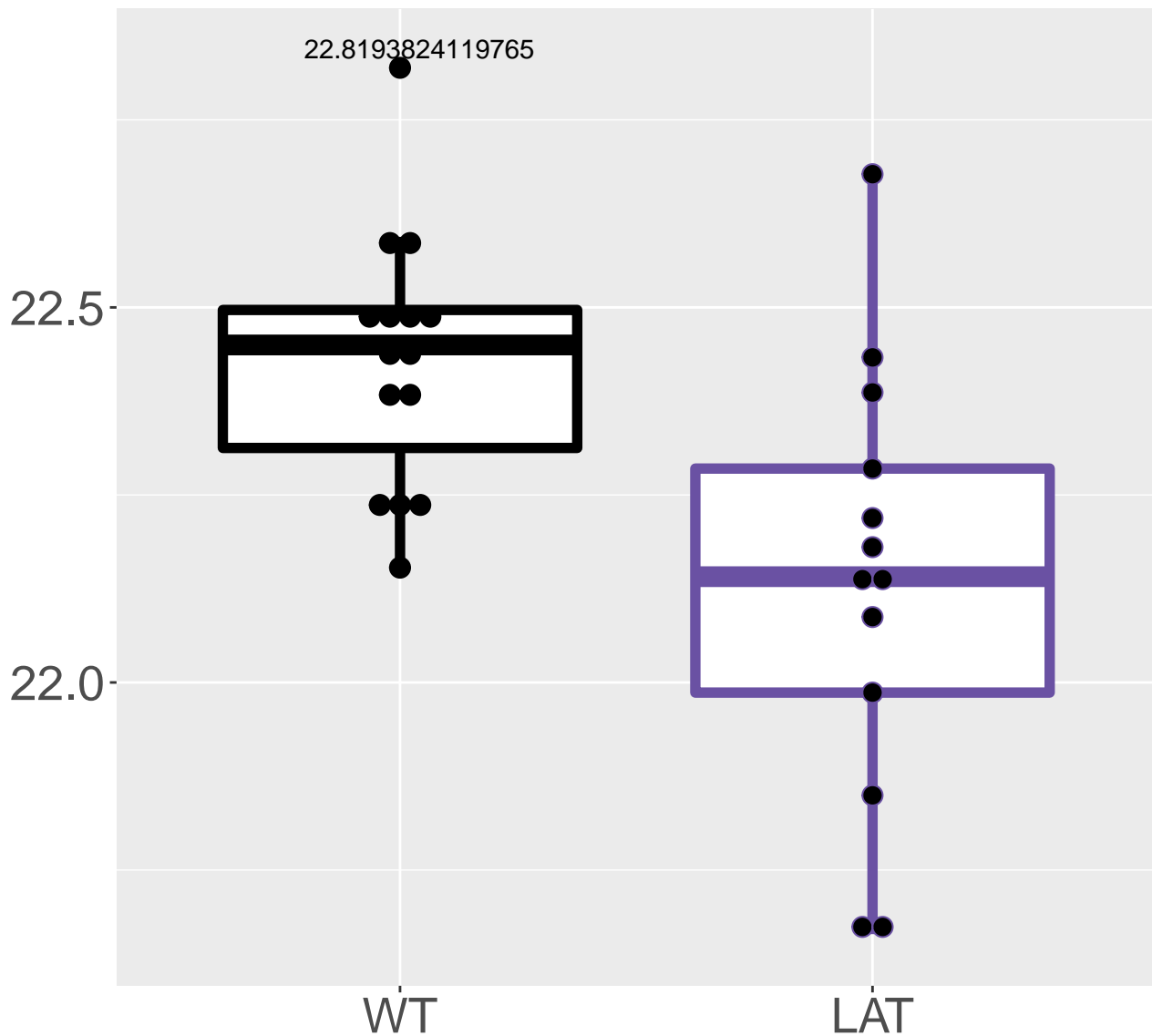


**M407.2042T181.1**

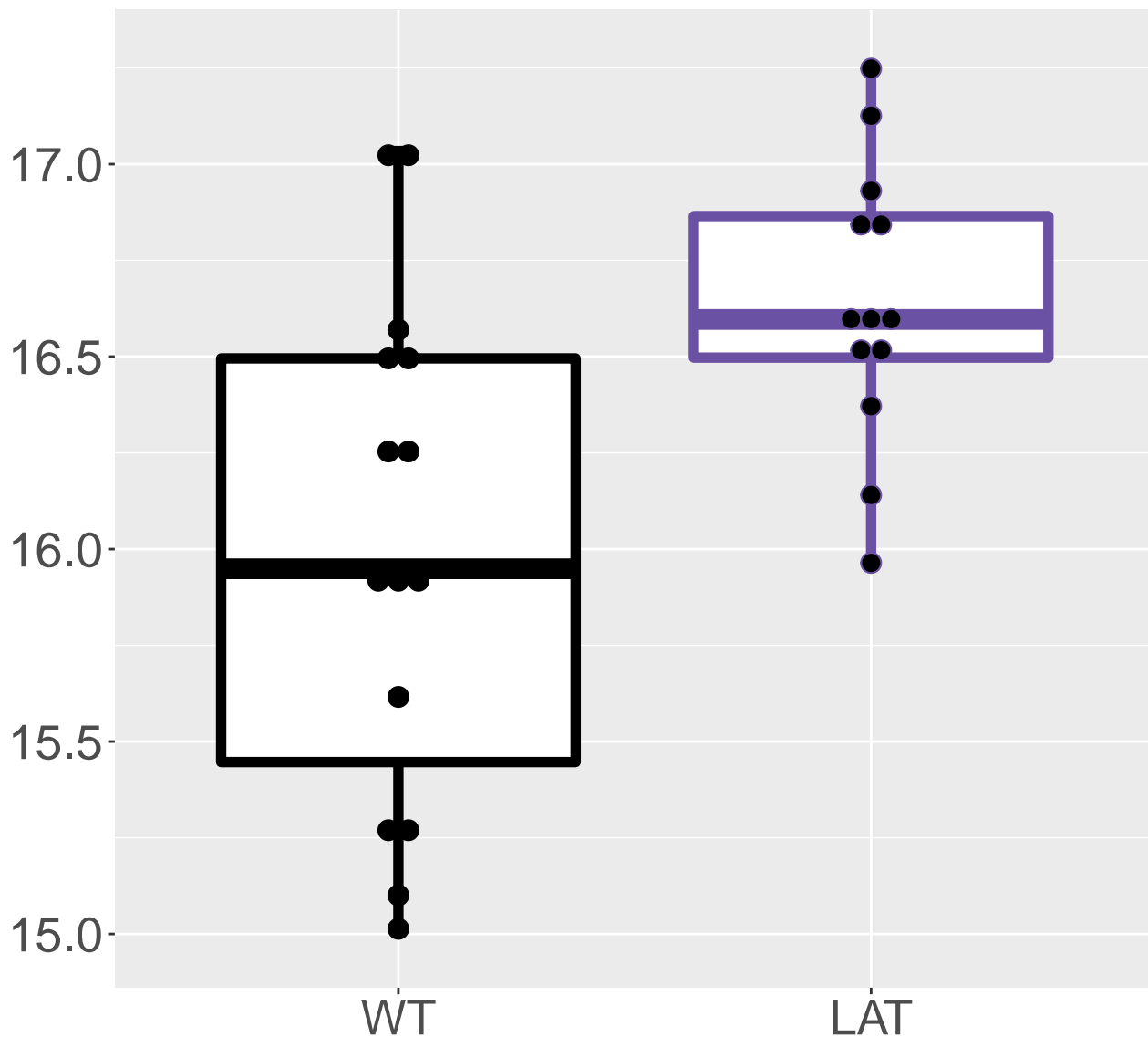
**FDR = 0.021, FC = -0.87, sex\*\***



**M601.1395T568.03**  
**FDR = 0.021, FC = -0.3**



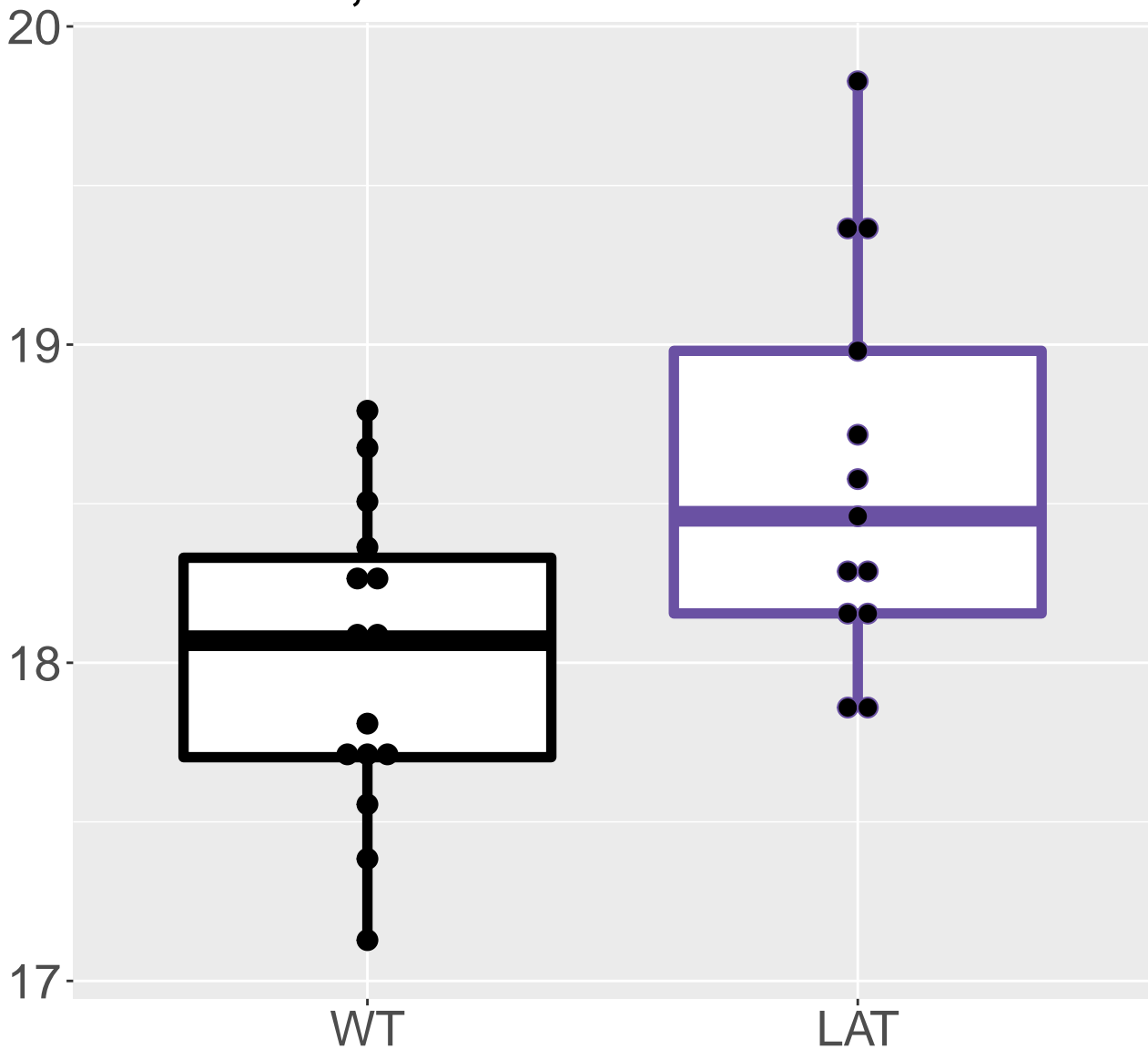
**M475.1245T503.97**  
**FDR = 0.021, FC = 0.63**





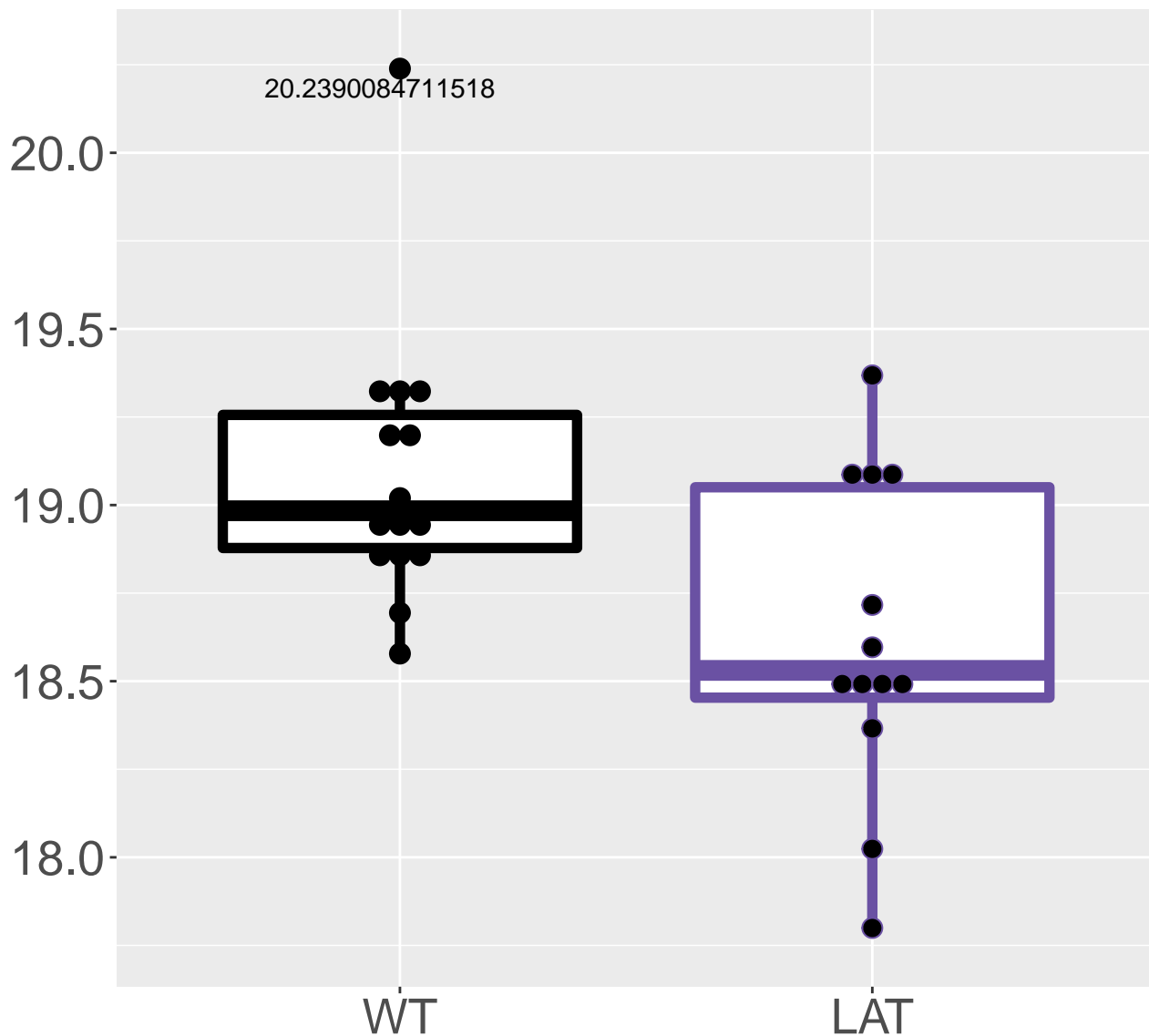
**M426.0229T526.63**

**FDR = 0.021, FC = 0.6**



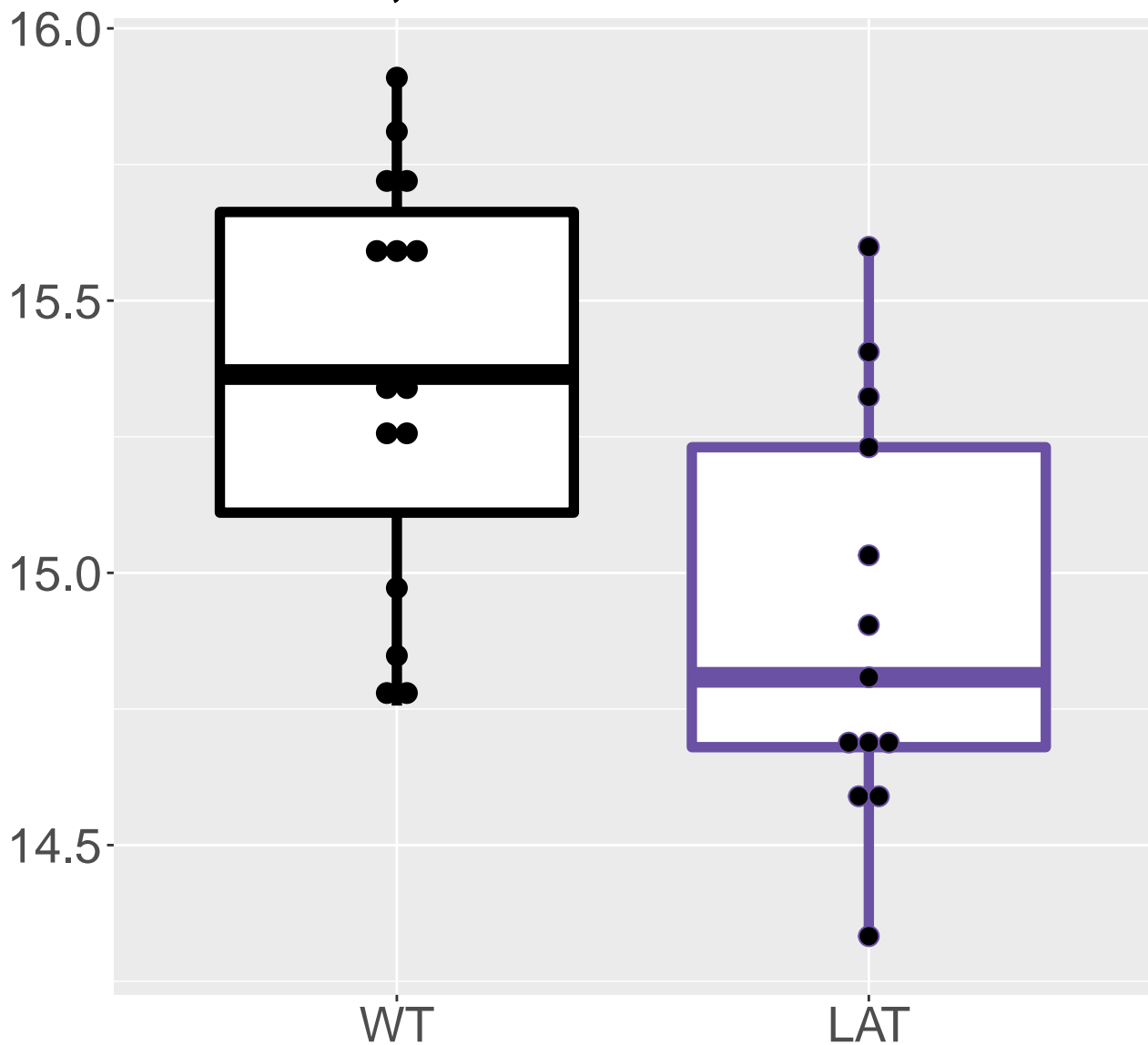
**M699.1164T564.04**

**FDR = 0.021, FC = -0.46**

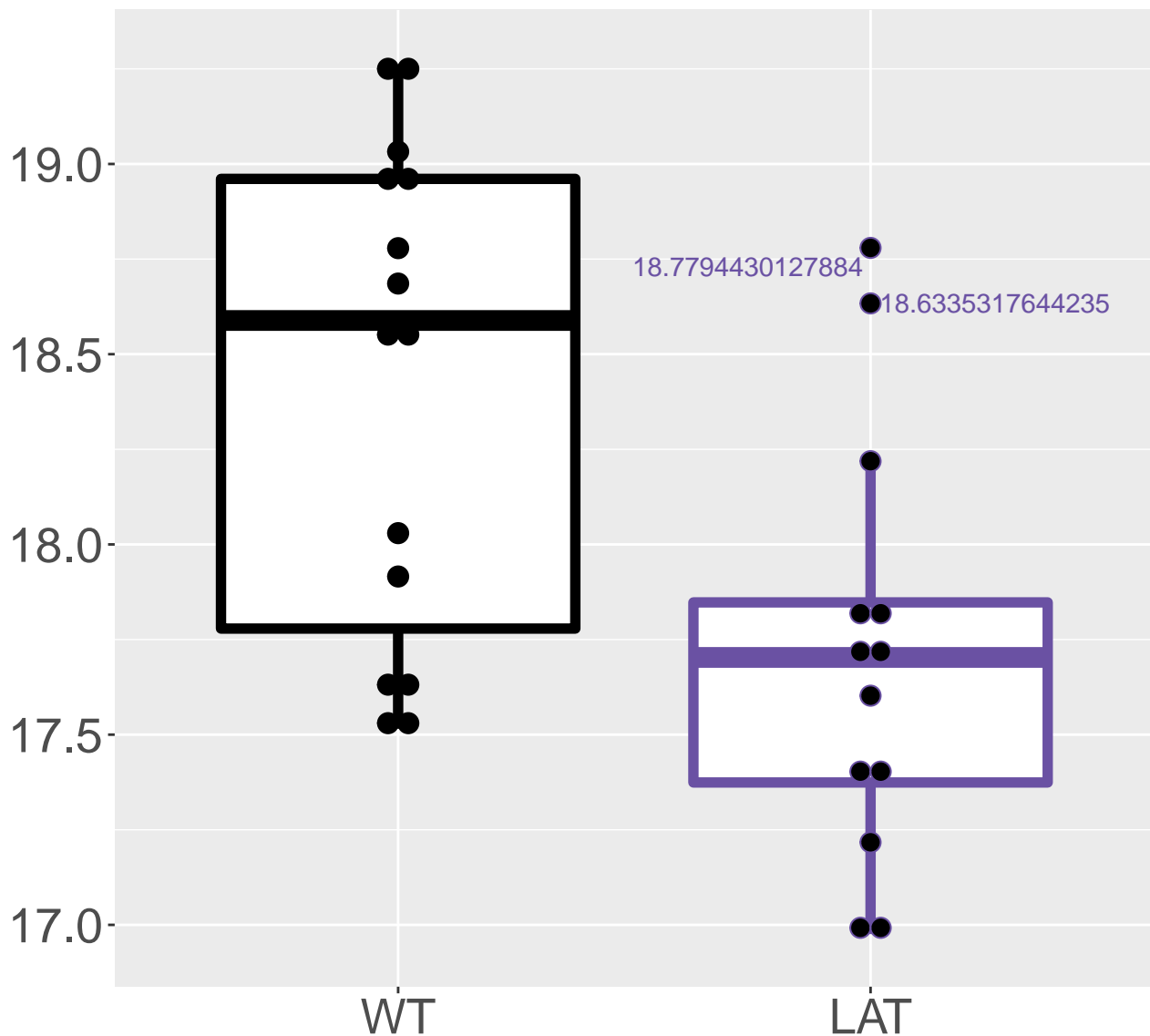


**M87.0326T570.13**

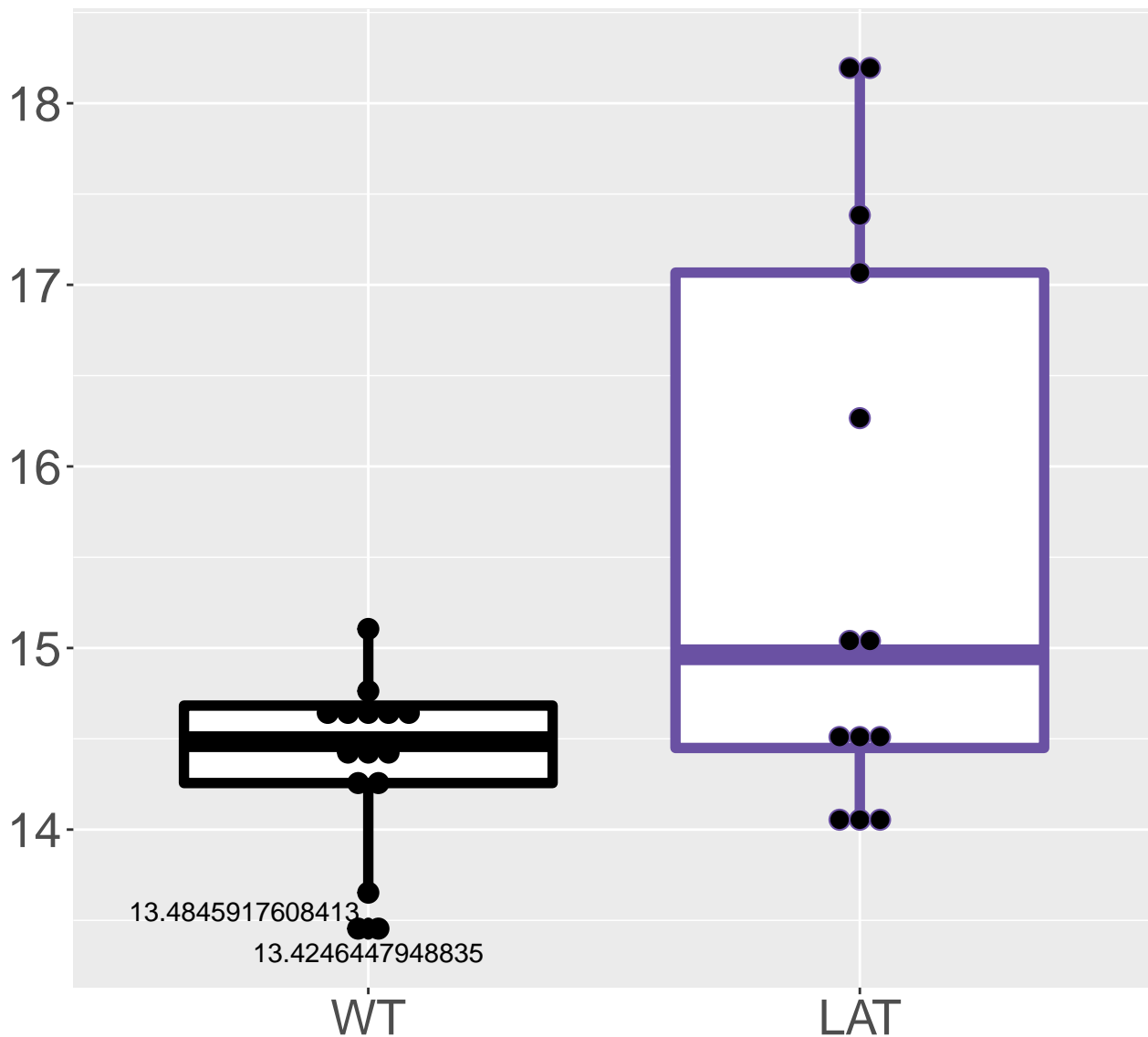
**FDR = 0.021, FC = -0.45**



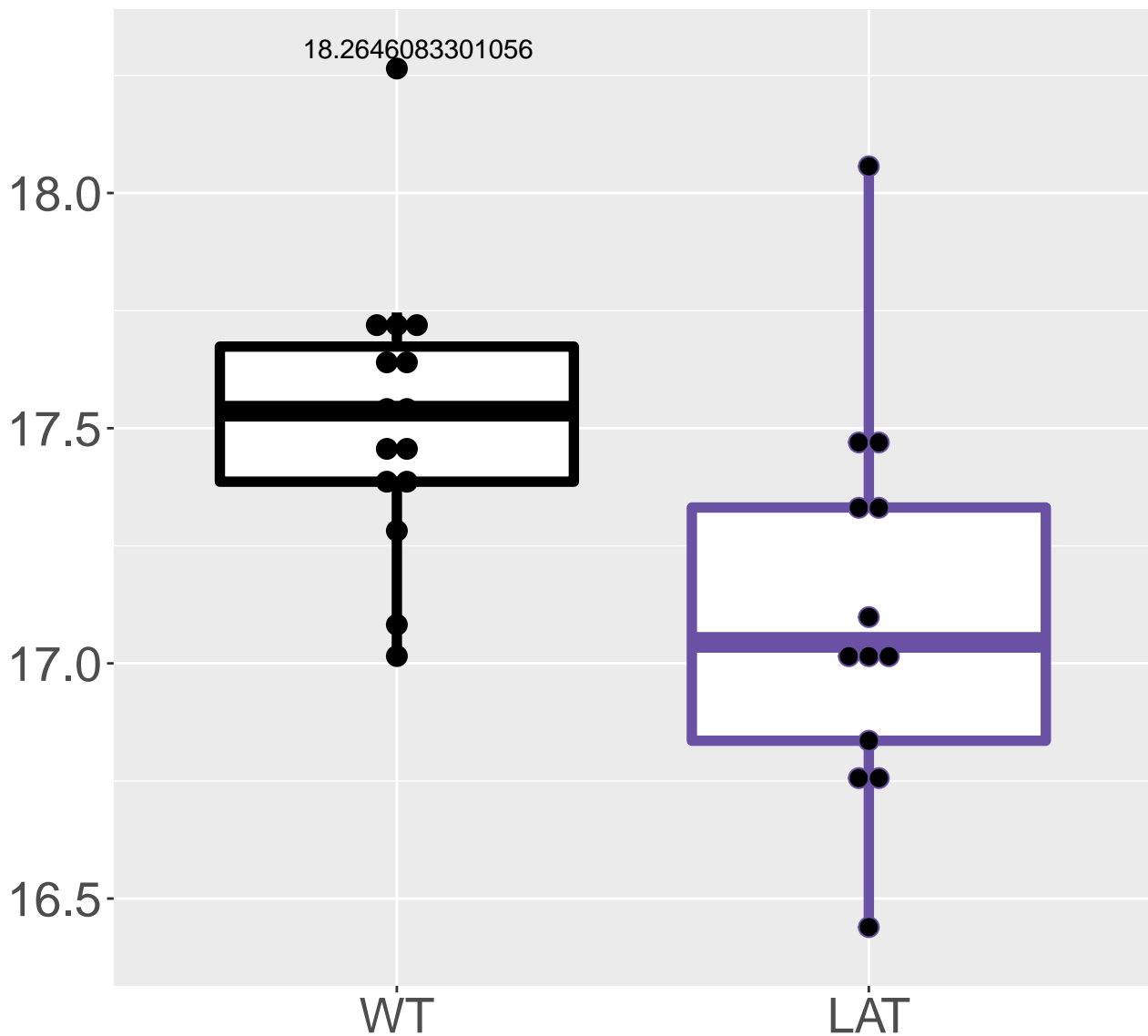
**M772.2193T590.13**  
**FDR = 0.021, FC = -0.7**



**M316.0347T409.32**  
**FDR = 0.021, FC = 1.2**

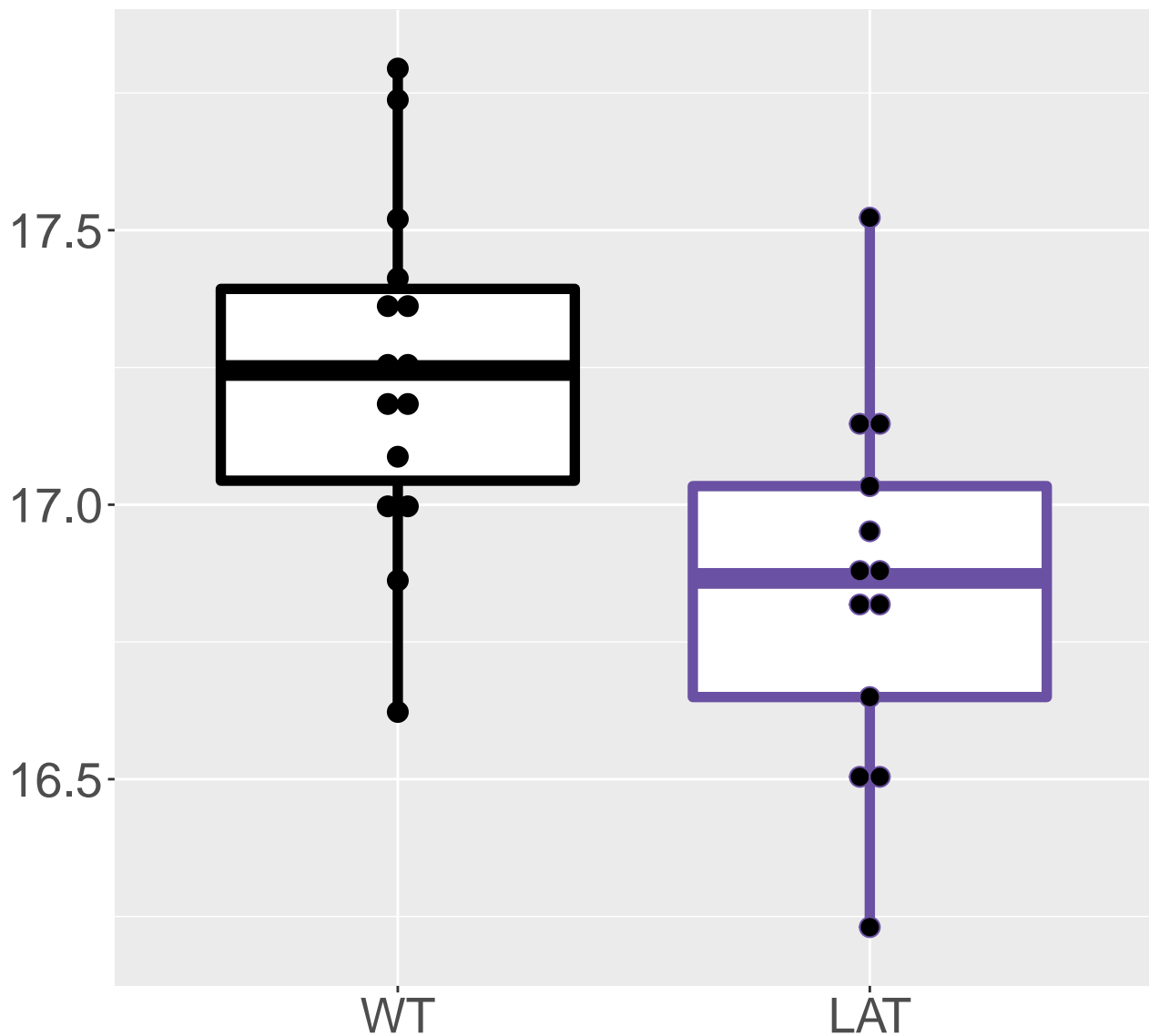


**M344.0673T338.35**  
**FDR = 0.022, FC = -0.4**



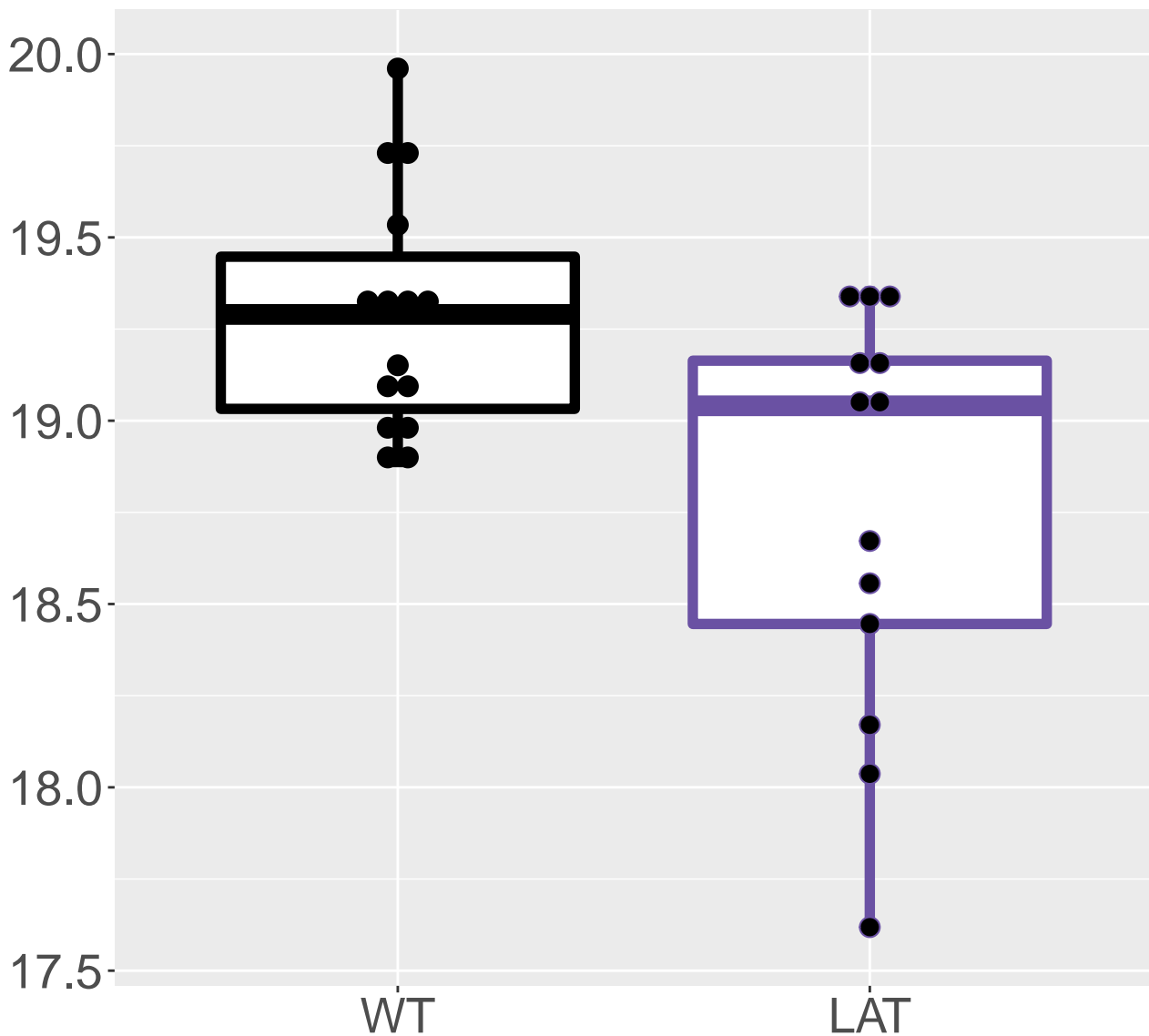
**M148.0617T488.77**

**FDR = 0.022, FC = -0.39**



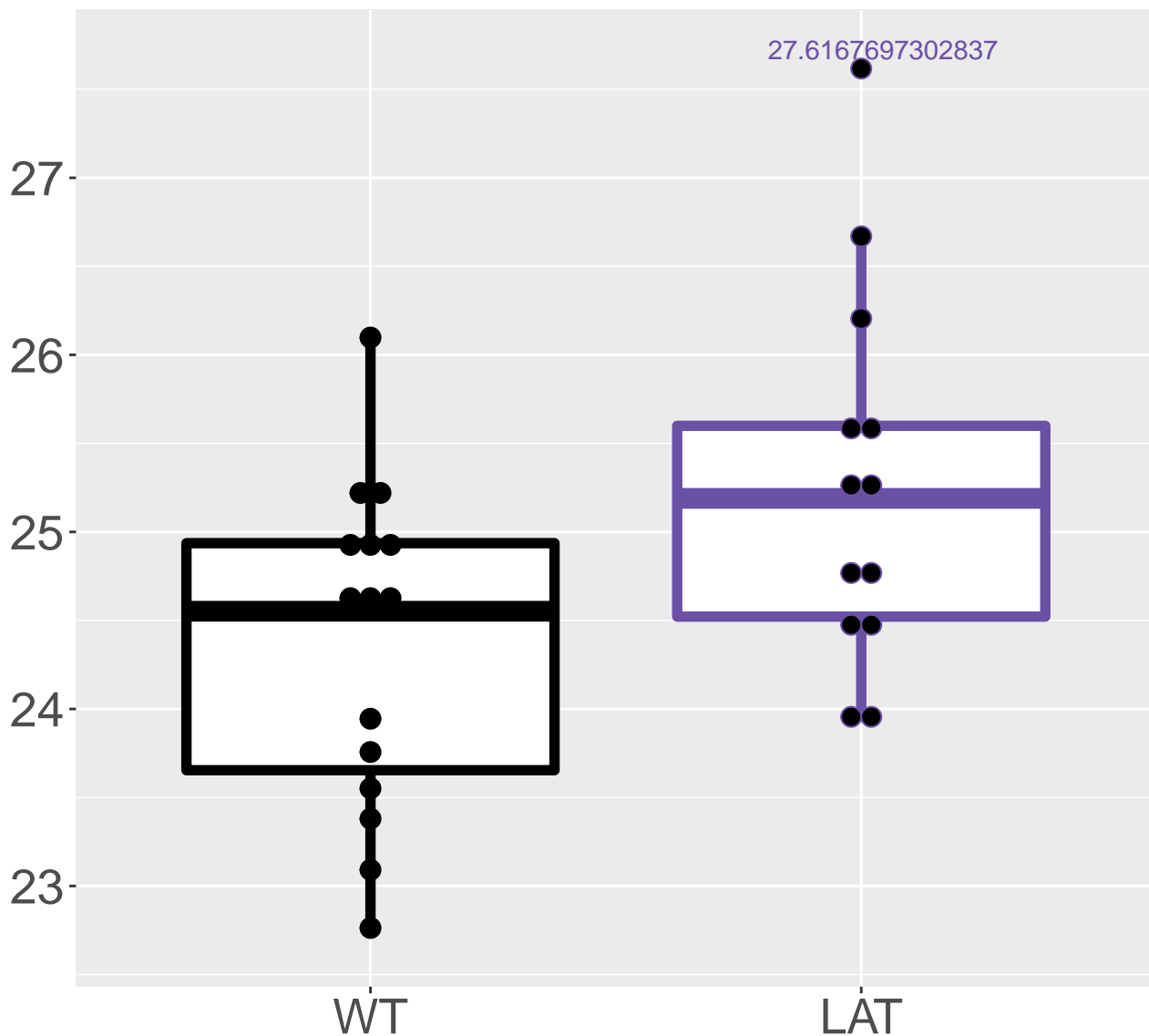
**M145.0256T321.91**

**FDR = 0.022, FC = -0.53**



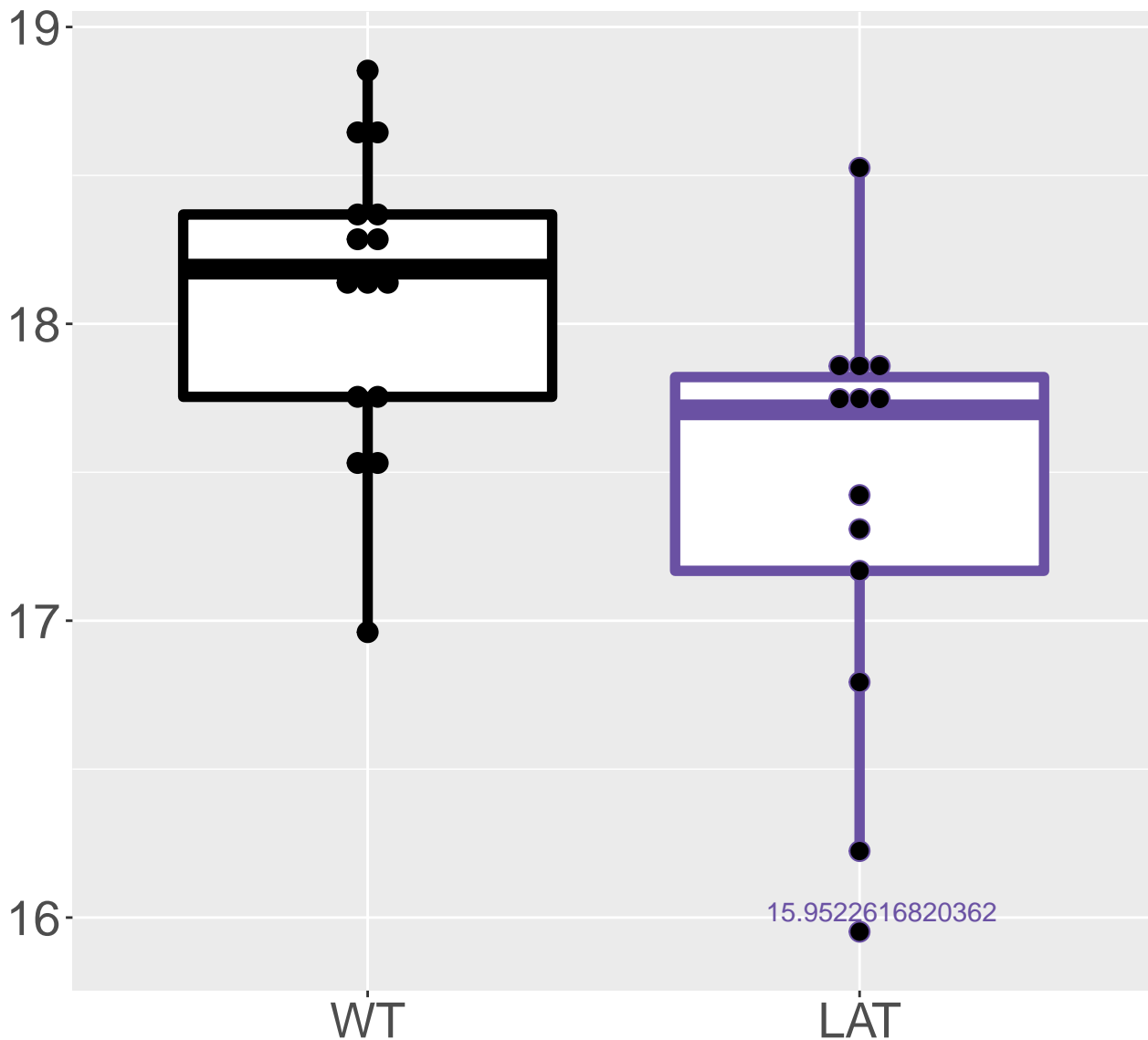


**Taurocholic acid;Taurocholate;Cholic acid tauri**  
**FDR = 0.024, FC = 0.9**

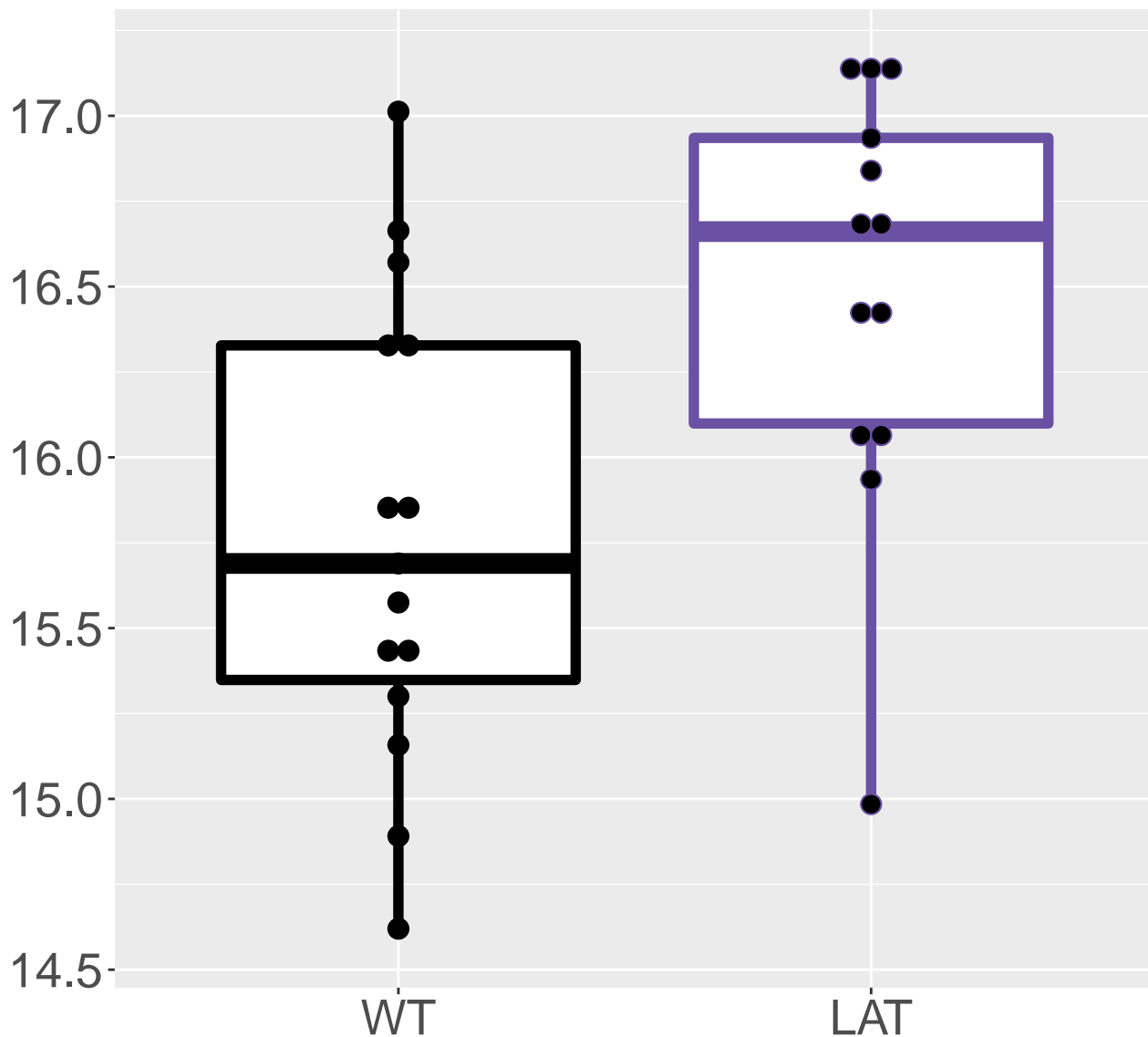


**M587.5069T77.41**

**FDR = 0.024, FC = -0.69**

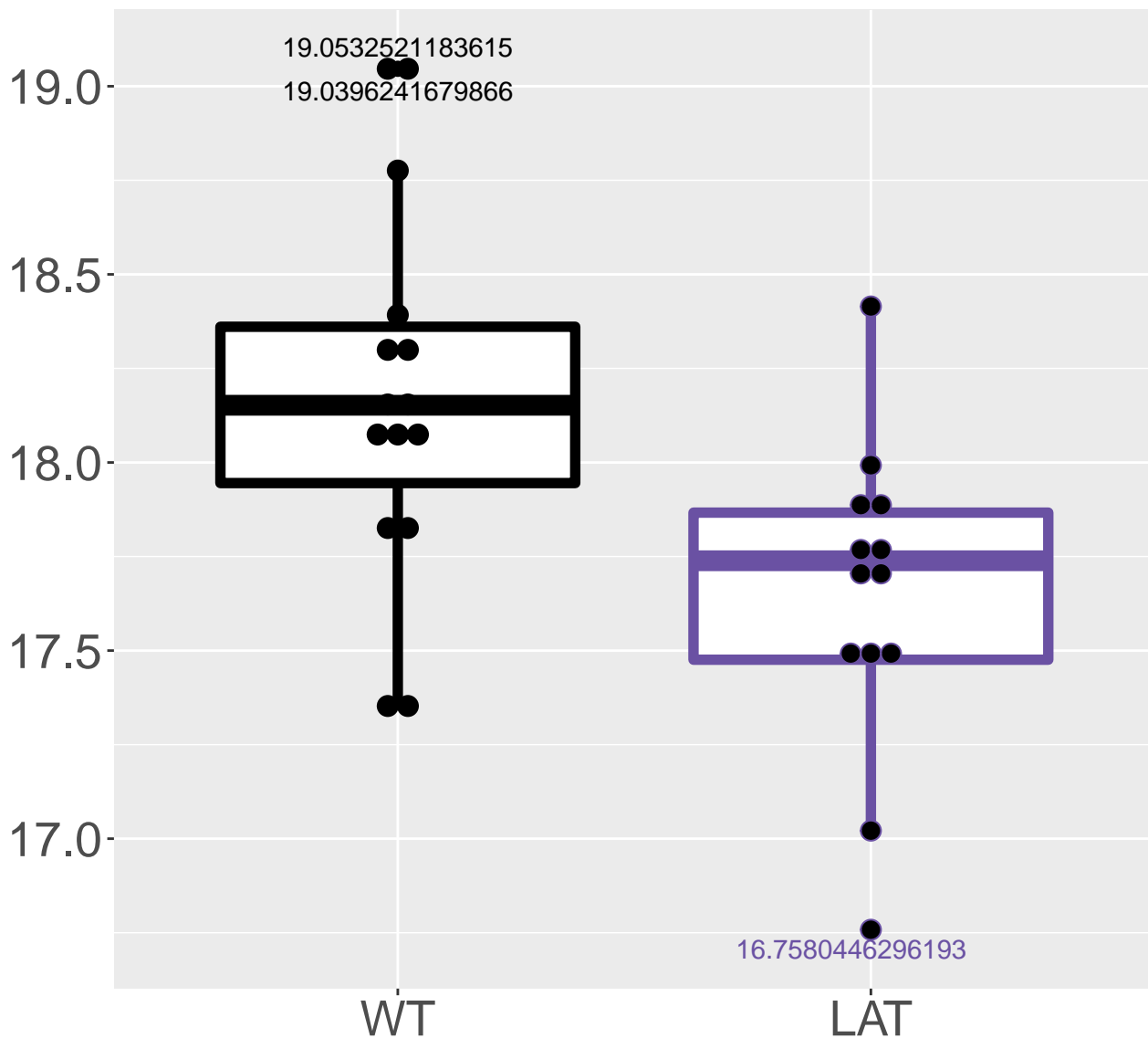


**M672.2026T314.78**  
**FDR = 0.024, FC = 0.71**

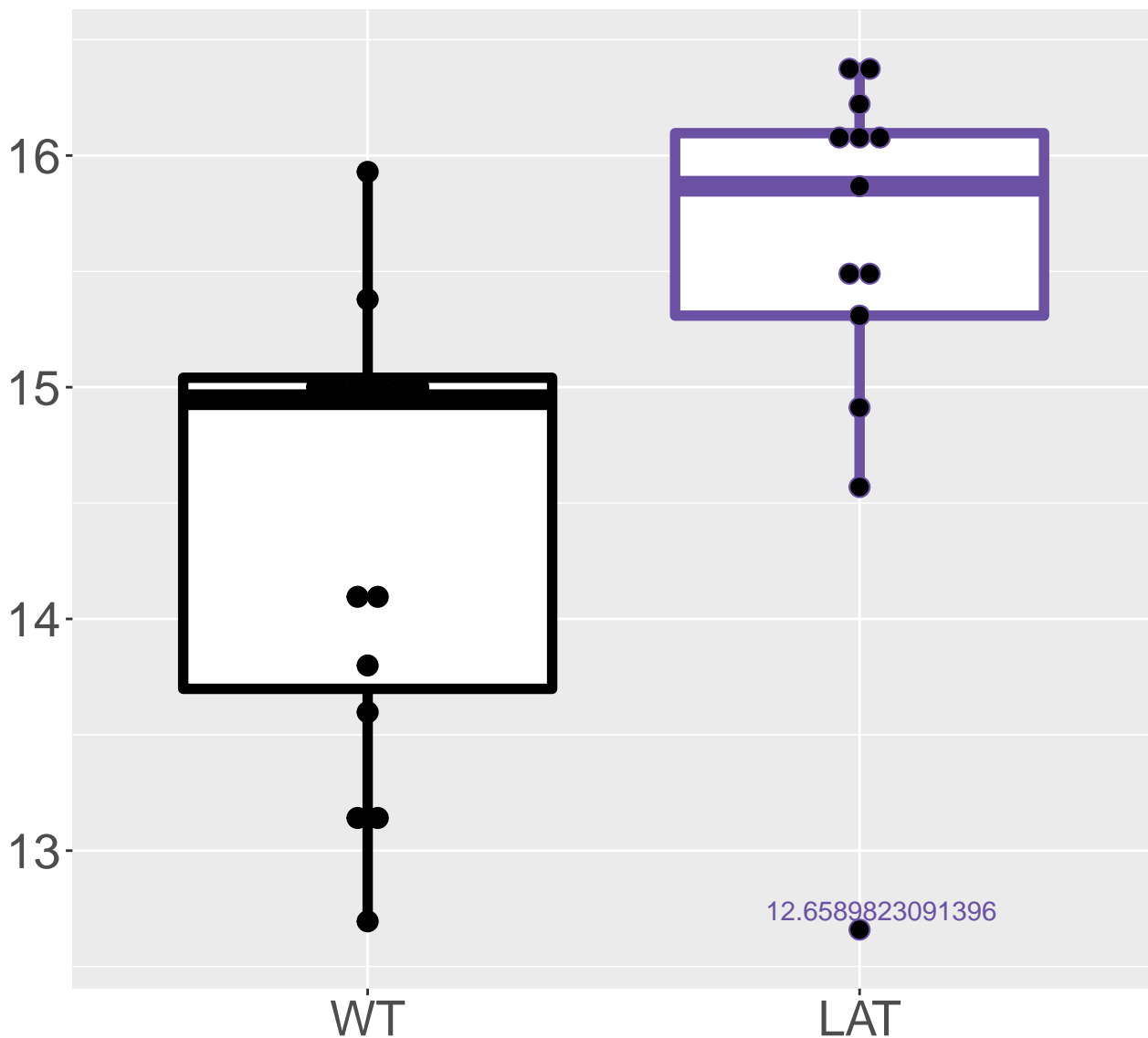


**M161.0648T258.33**

**FDR = 0.024, FC = -0.54**

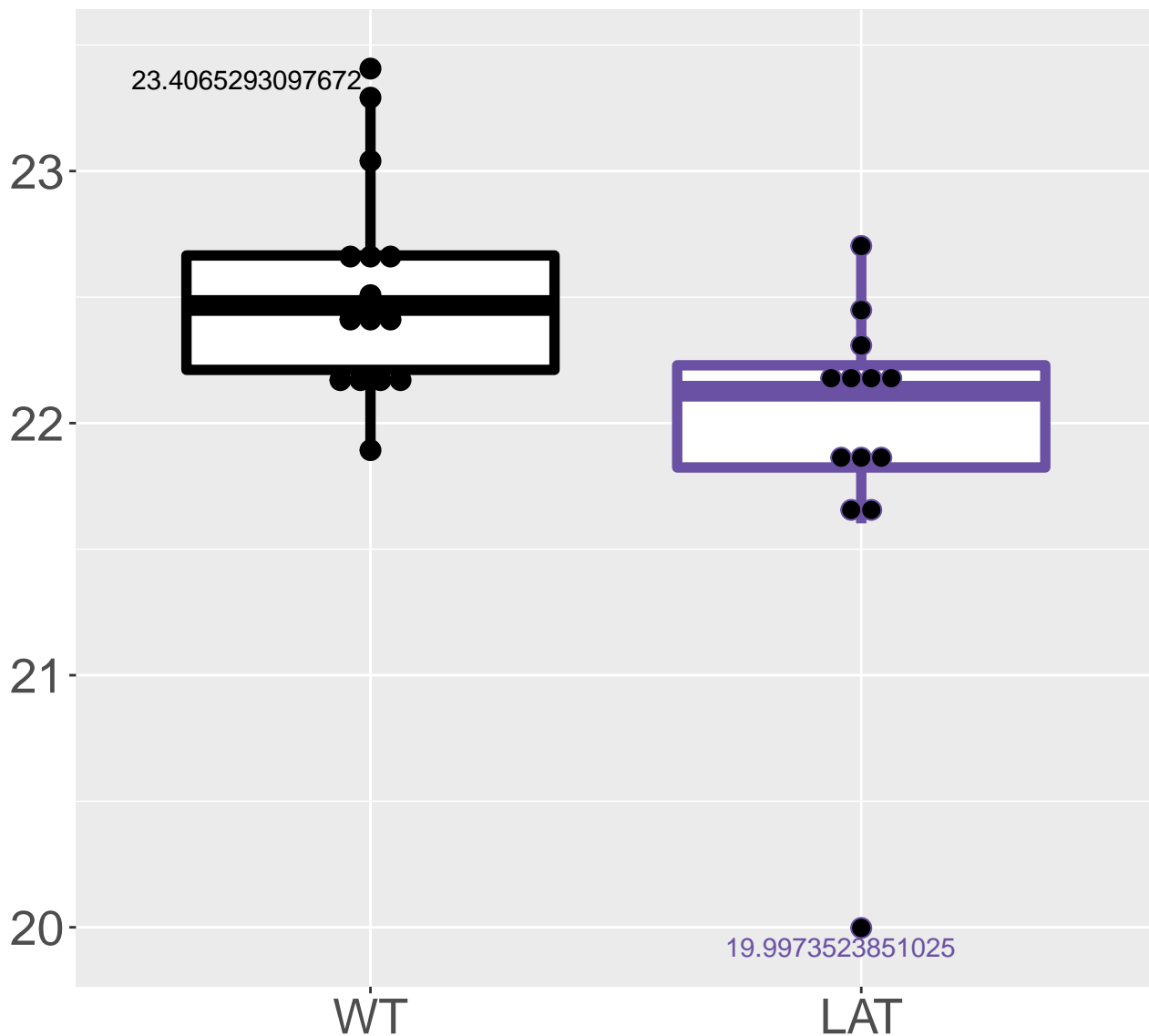


**M661.128T598.56\_2**  
**FDR = 0.025, FC = 1.1**



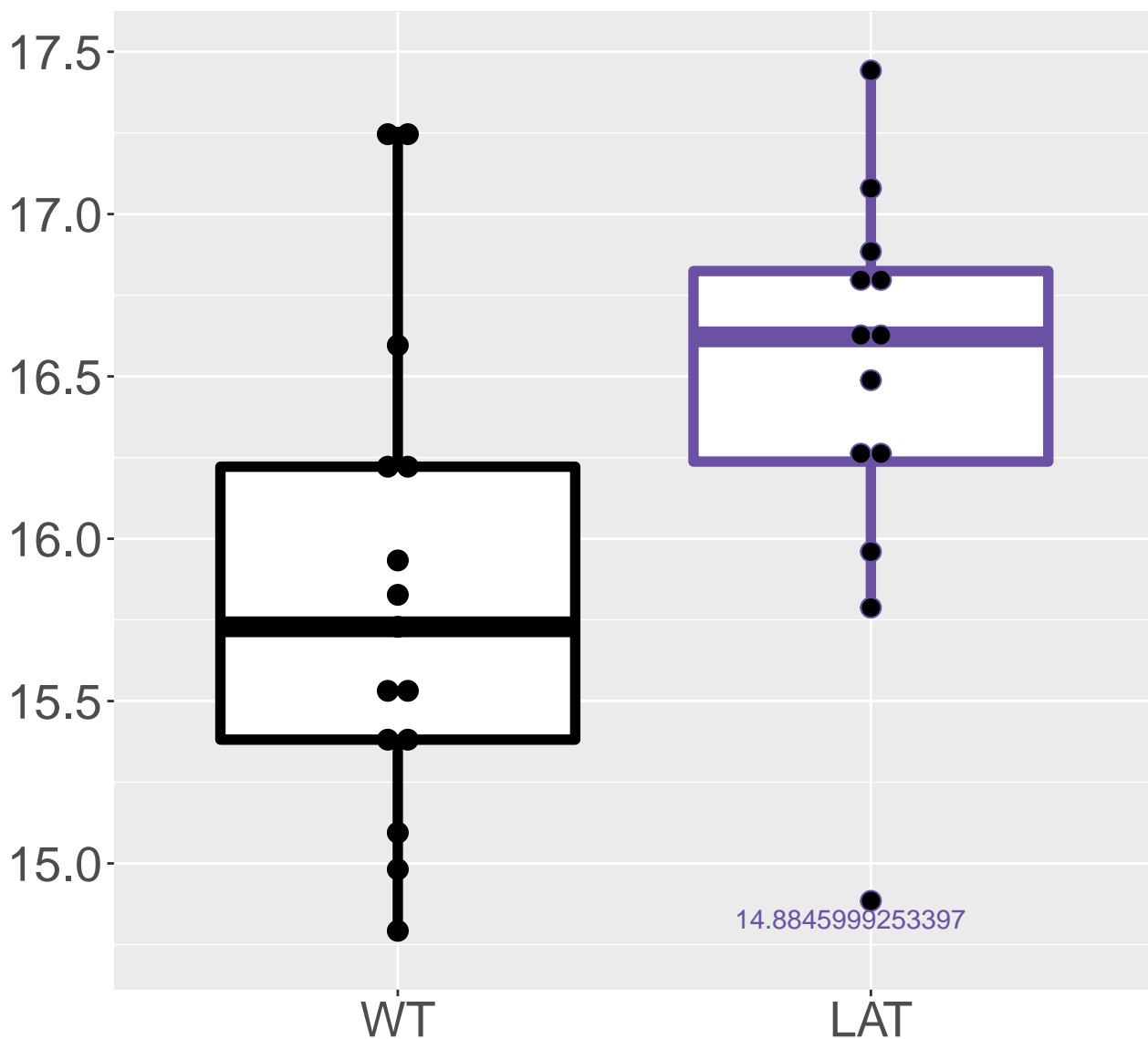
**M160.0614T258.55**

**FDR = 0.026, FC = -0.62**



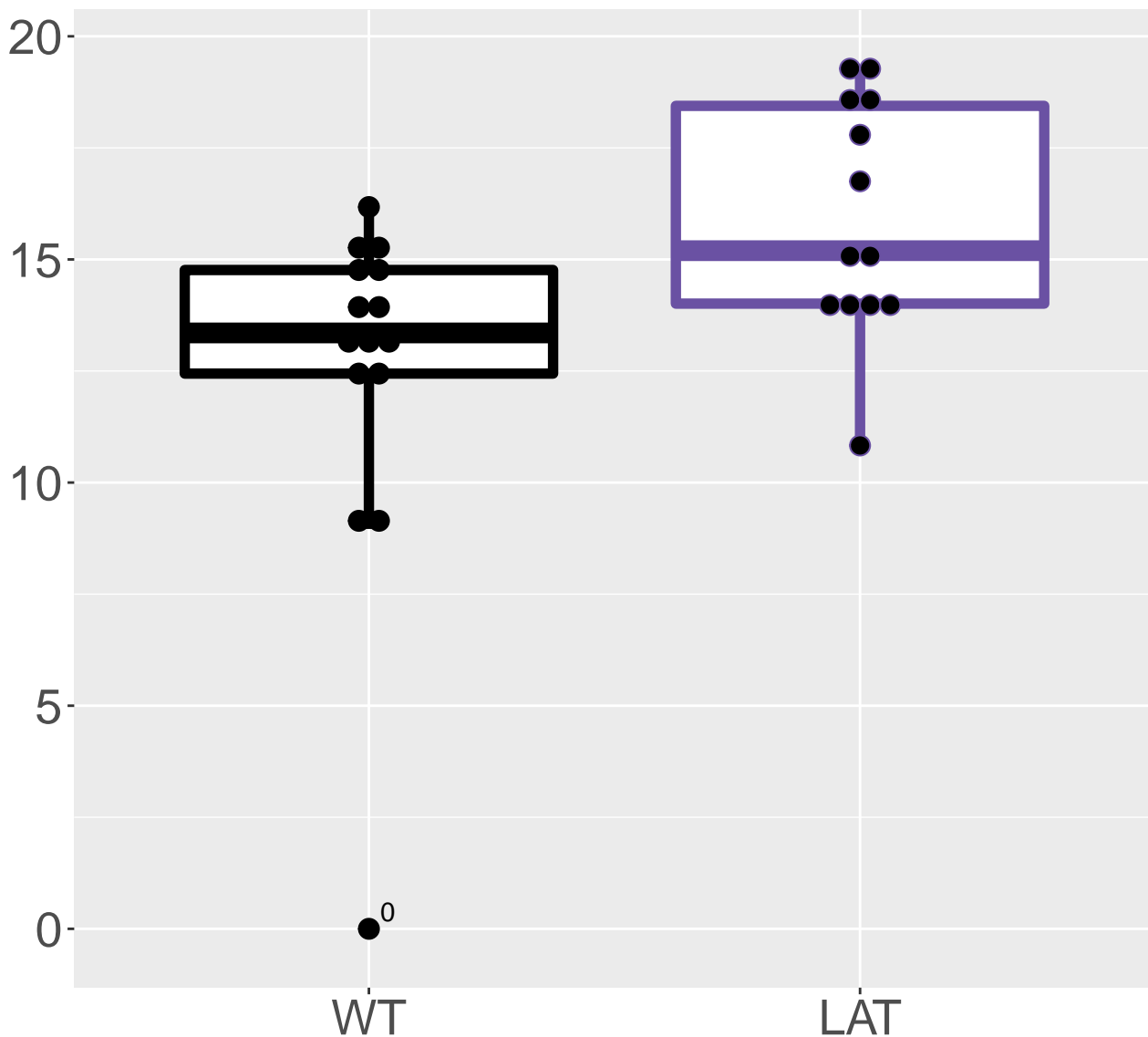
**M434.1183T364.85**

**FDR = 0.027, FC = 0.61, sex\*\*\***



**M123.0565T102.08**

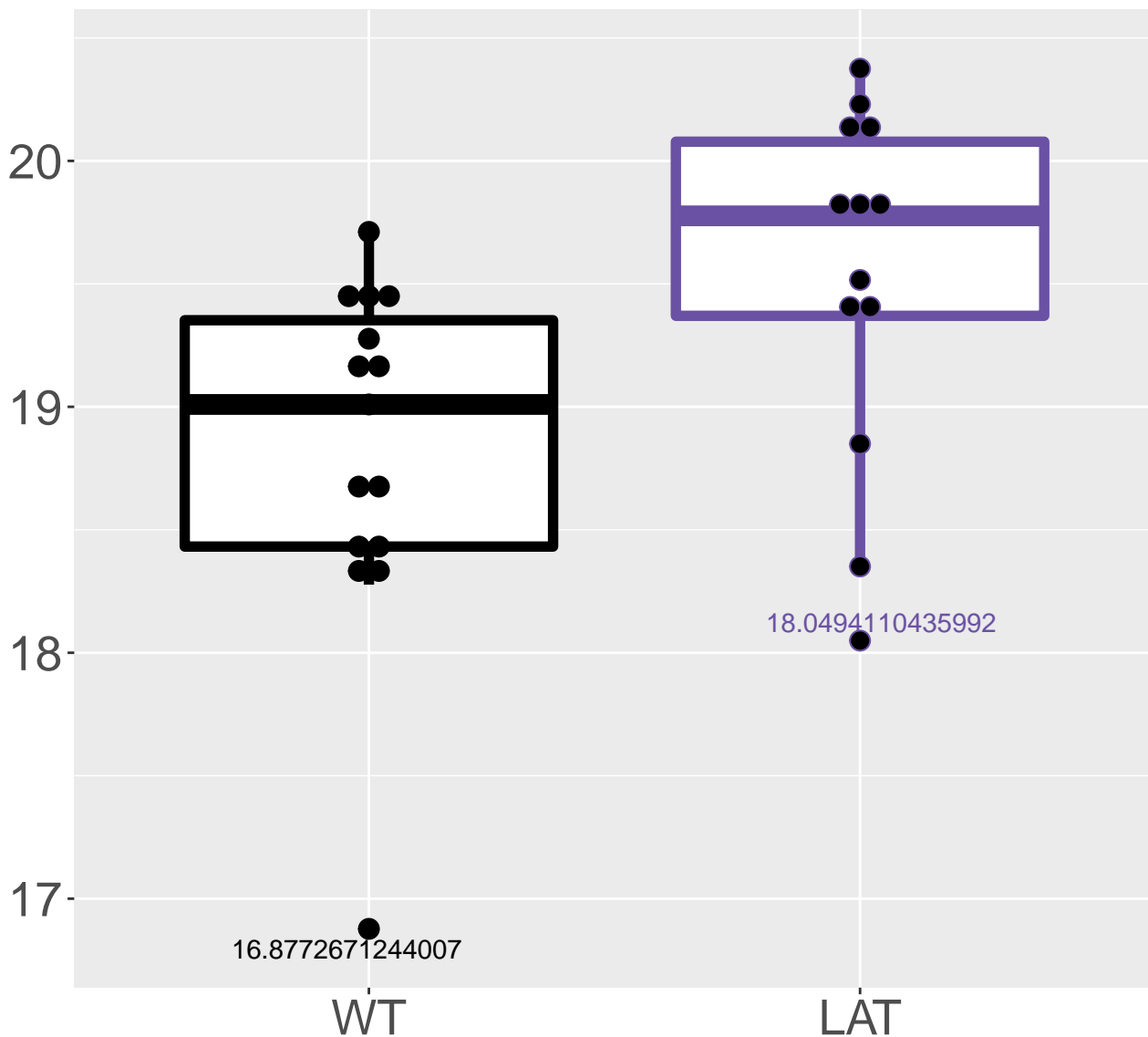
**FDR = 0.027, FC = 3.5, sex\***



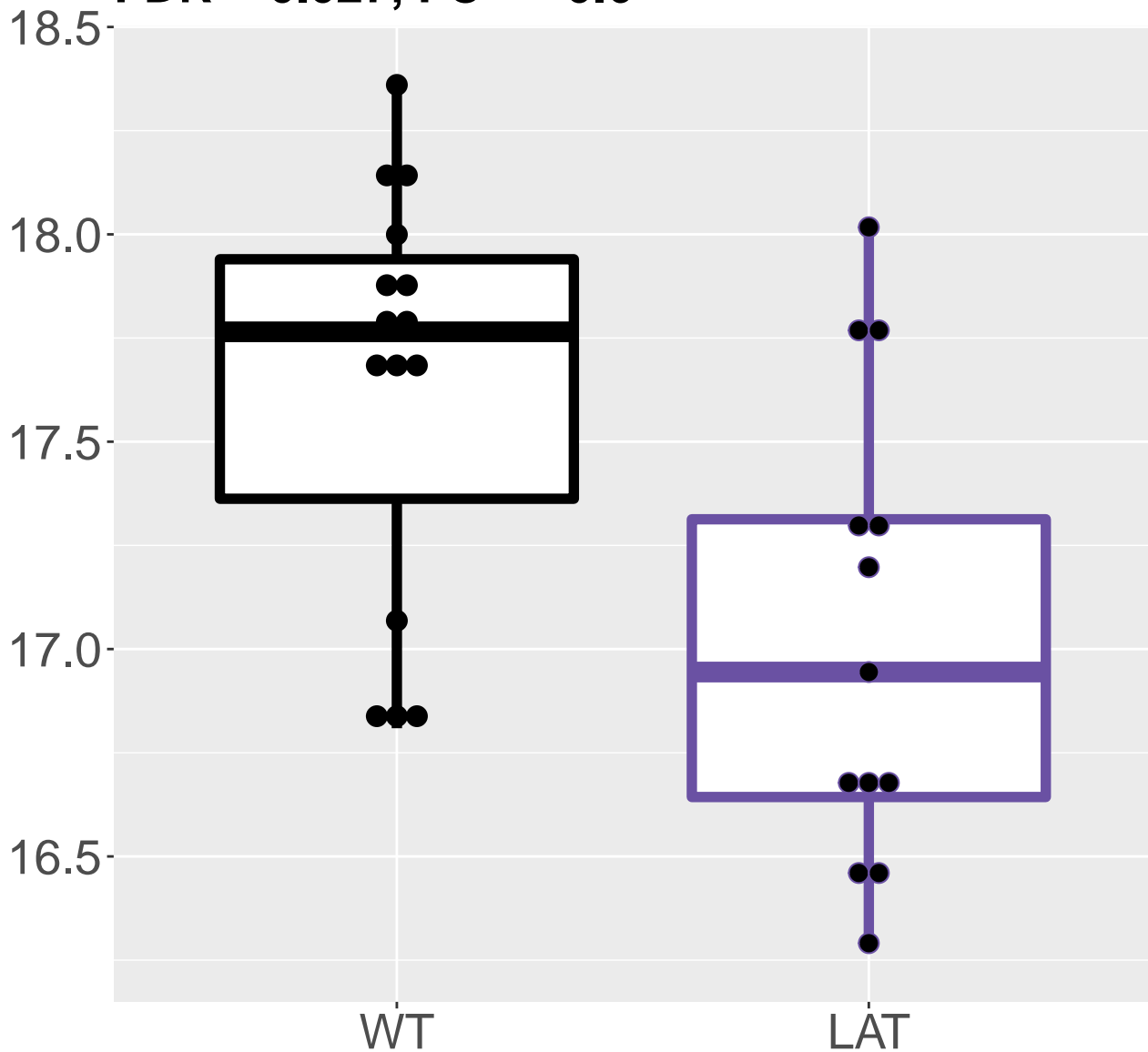


**M455.154T310.53**

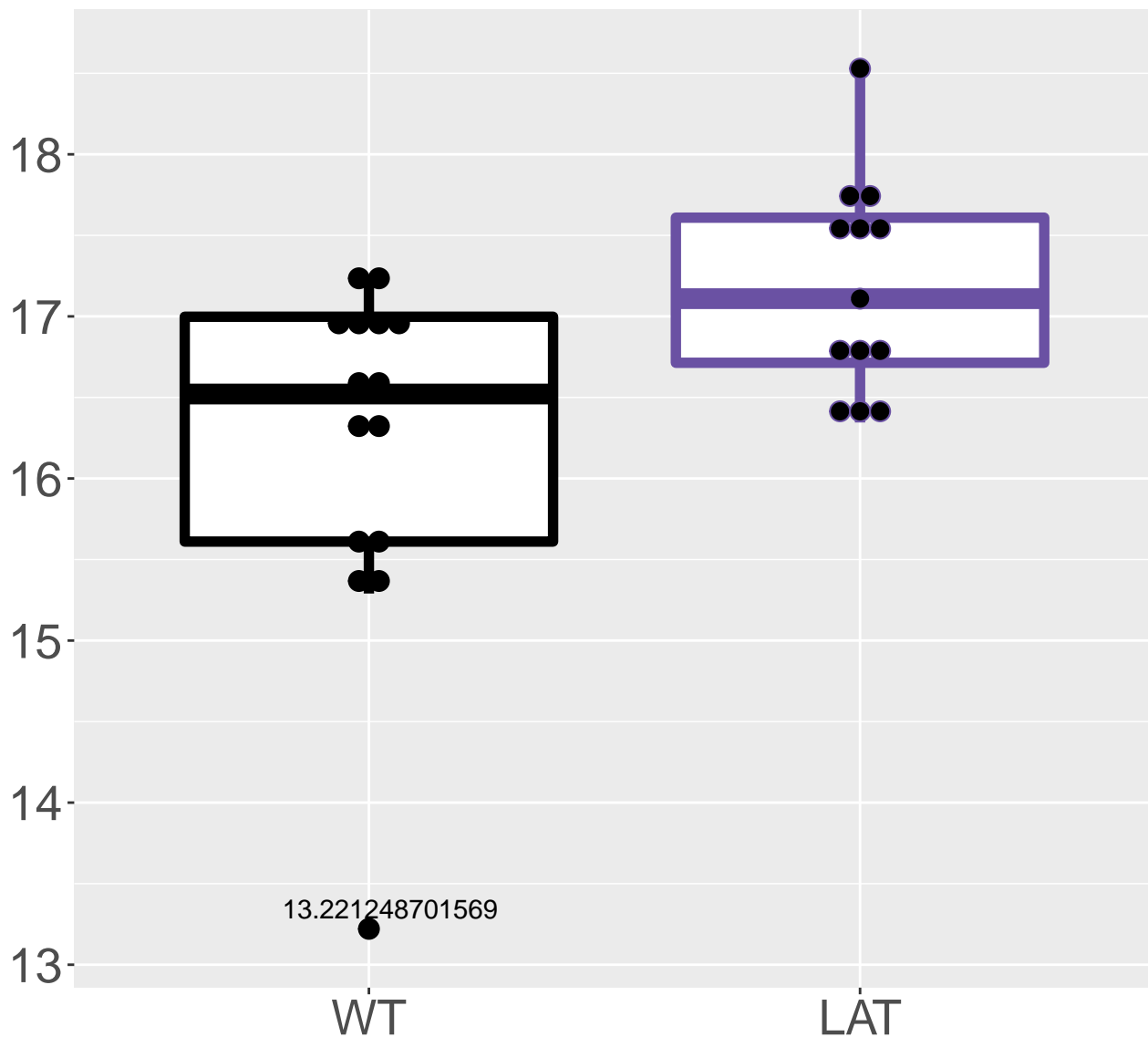
**FDR = 0.027, FC = 0.7, sex\***



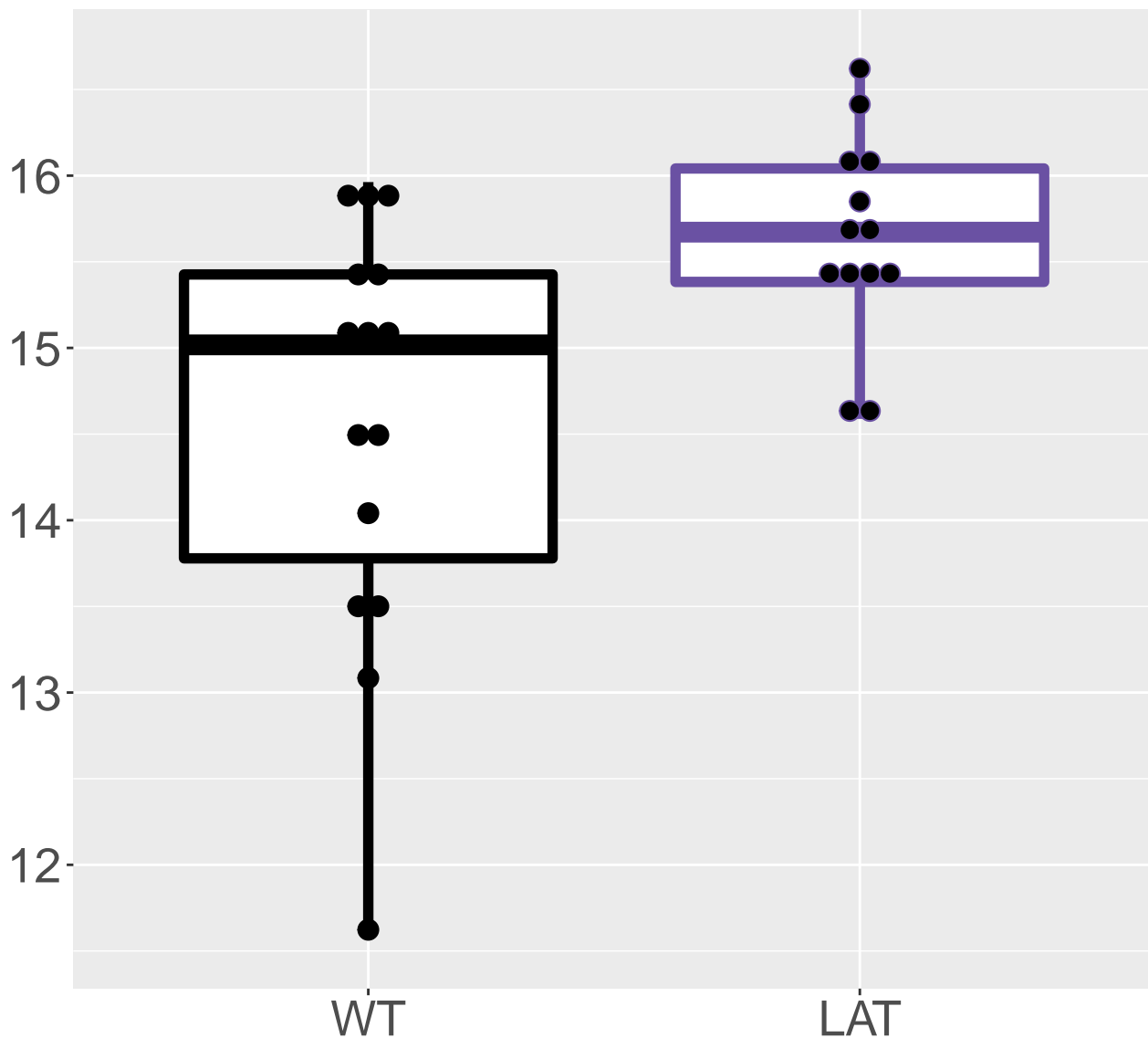
**M364.1256T181.58**  
**FDR = 0.027, FC = -0.6**



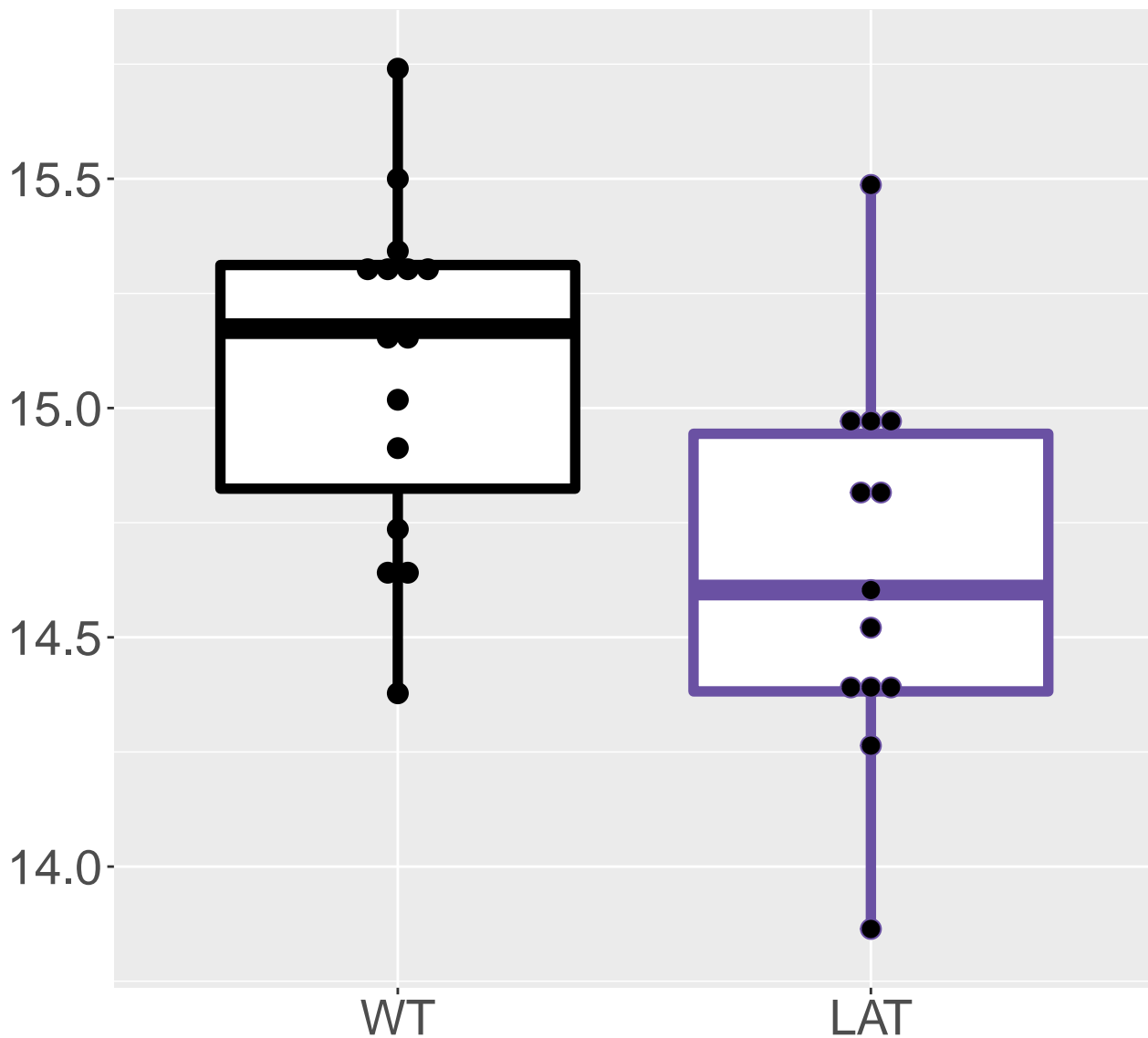
**M319.0441T528.26**  
**FDR = 0.027, FC = 0.96**



**M445.1601T498.05**  
**FDR = 0.028, FC = 1.1**

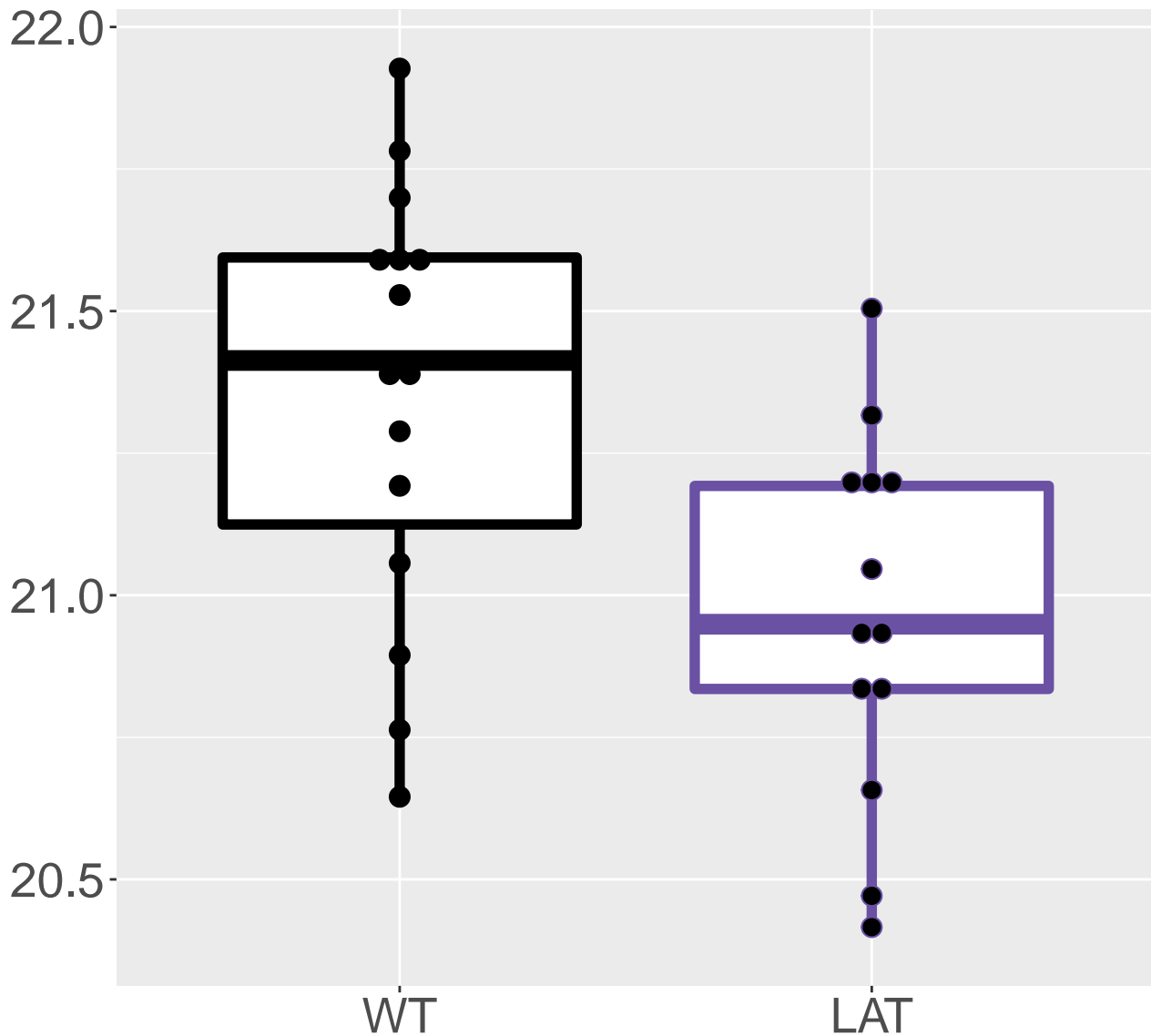


**FDR = 0.028, FC = -0.44**

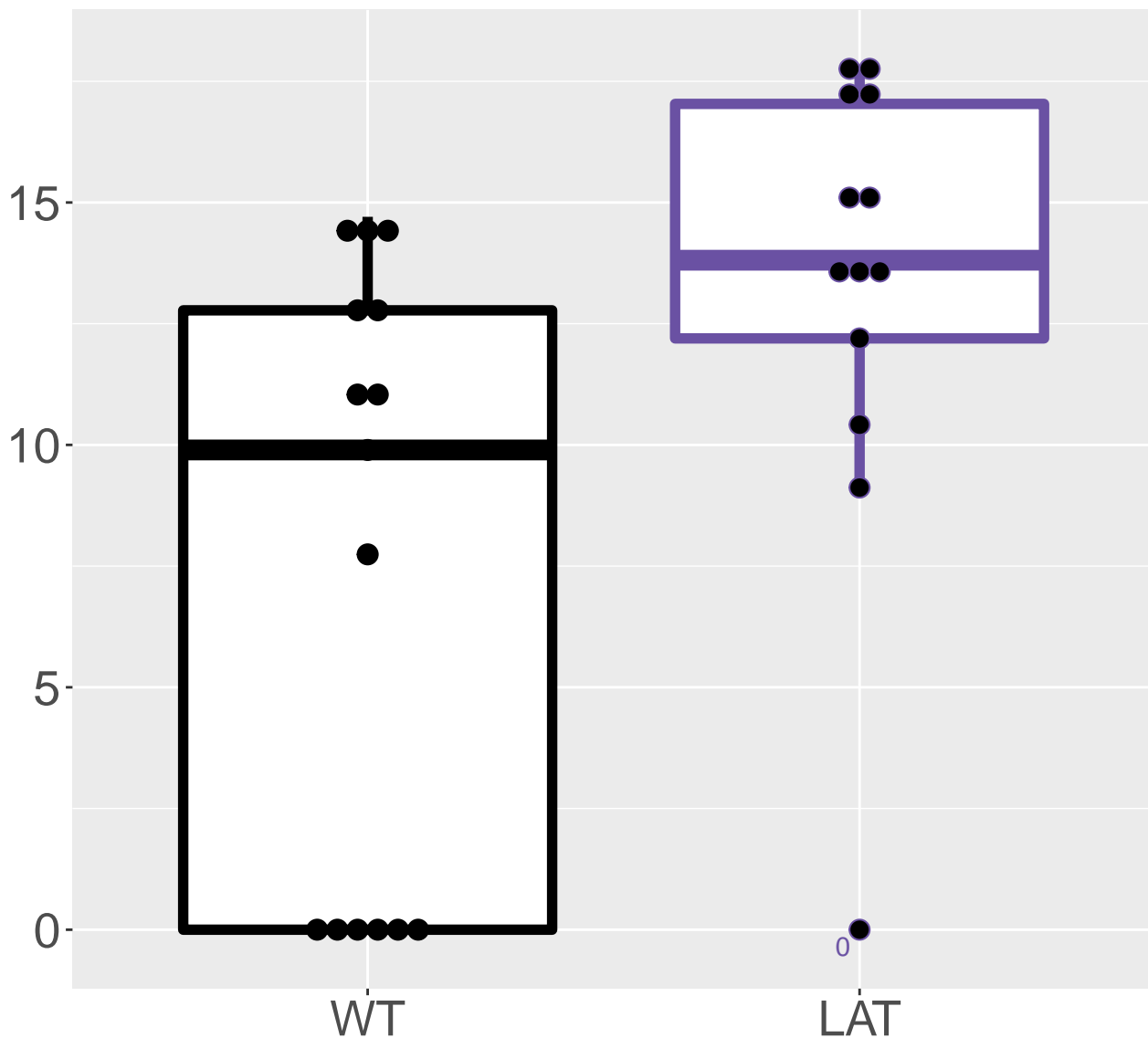


**M267.2332T78.34**

**FDR = 0.029, FC = -0.39**

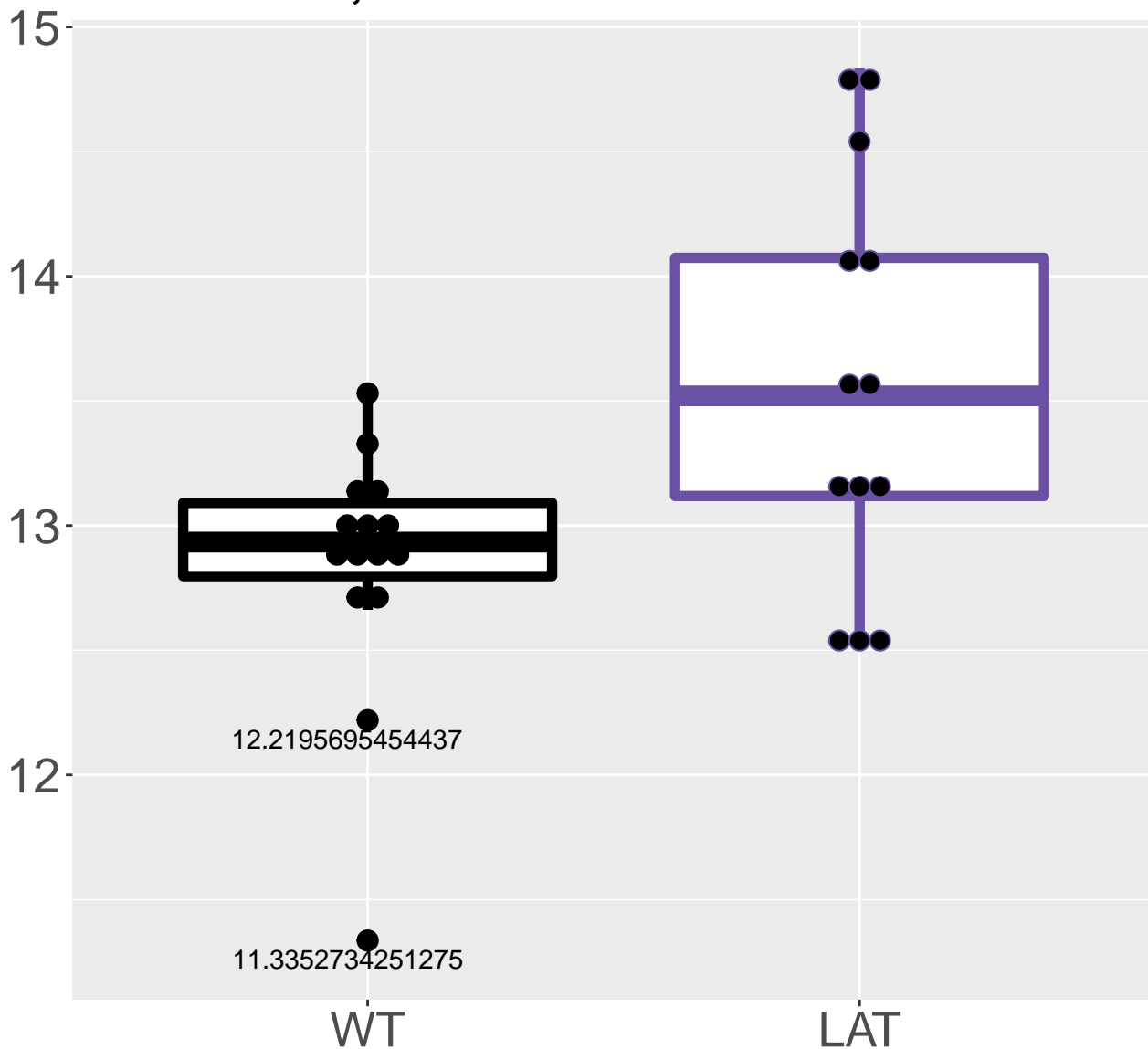


**M127.0337T146.91**  
**FDR = 0.029, FC = 6**



**M440.6096T657.23**

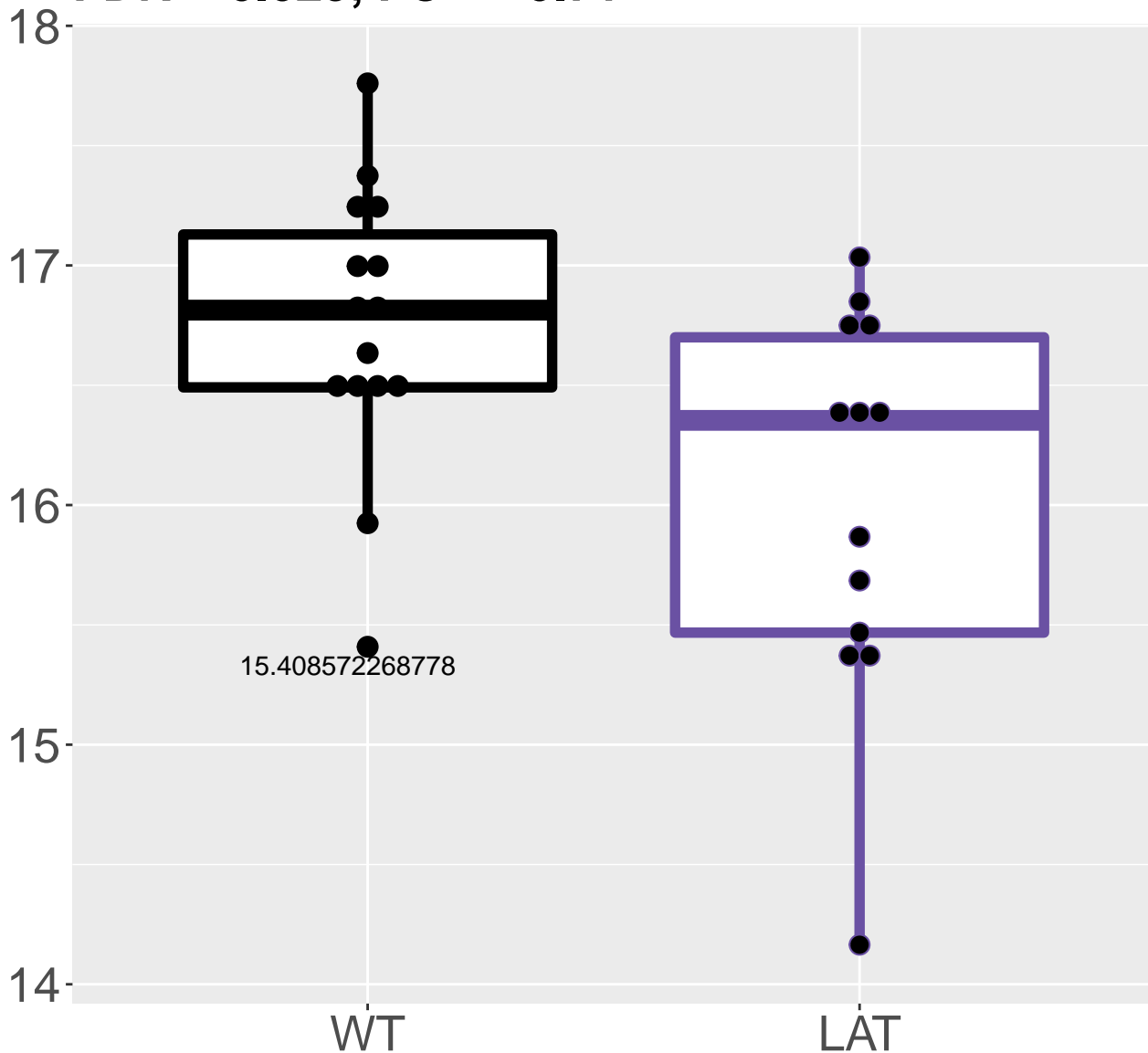
**FDR = 0.029, FC = 0.73**



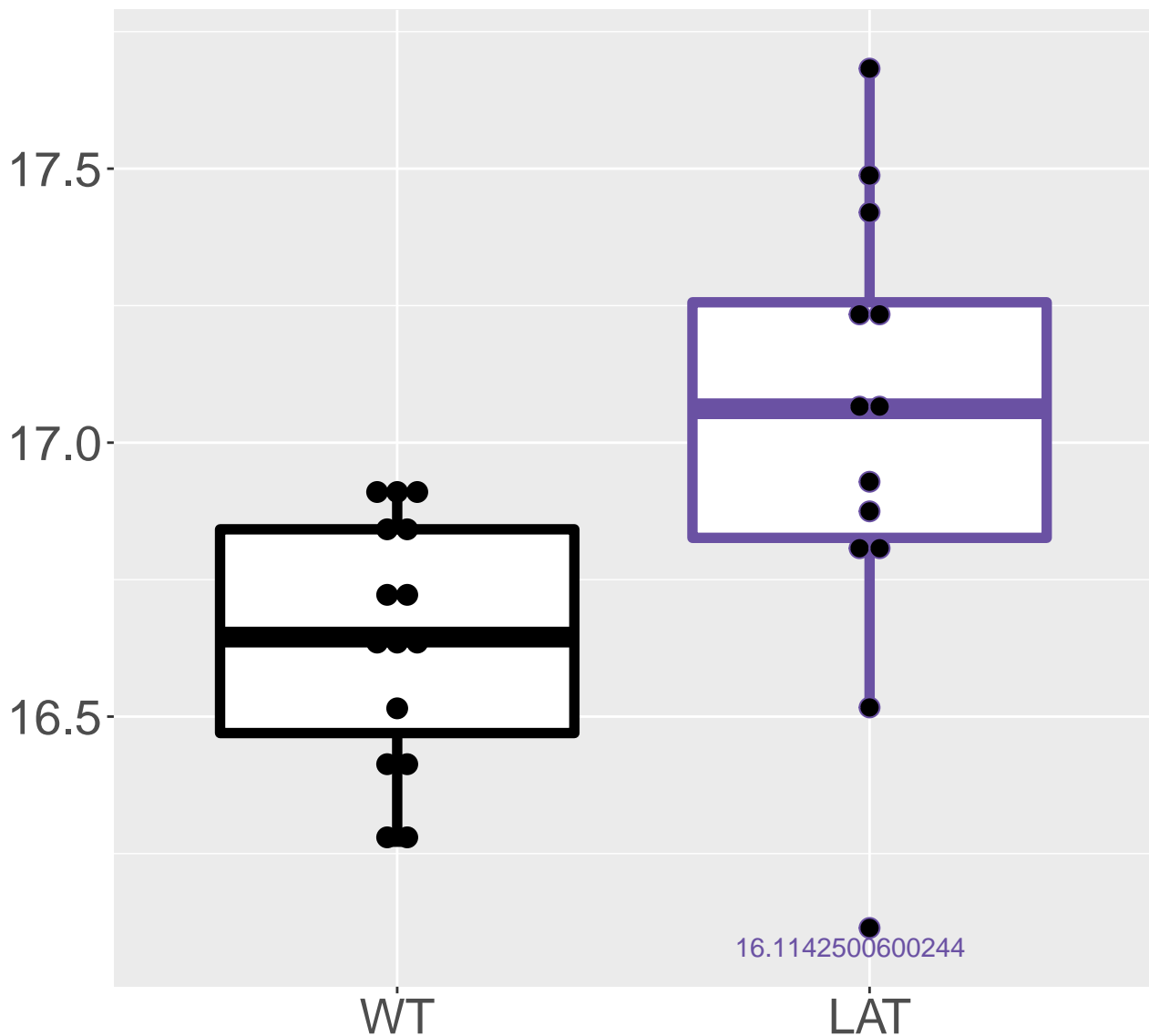


**M279.1567T426.06**

**FDR = 0.029, FC = -0.71**

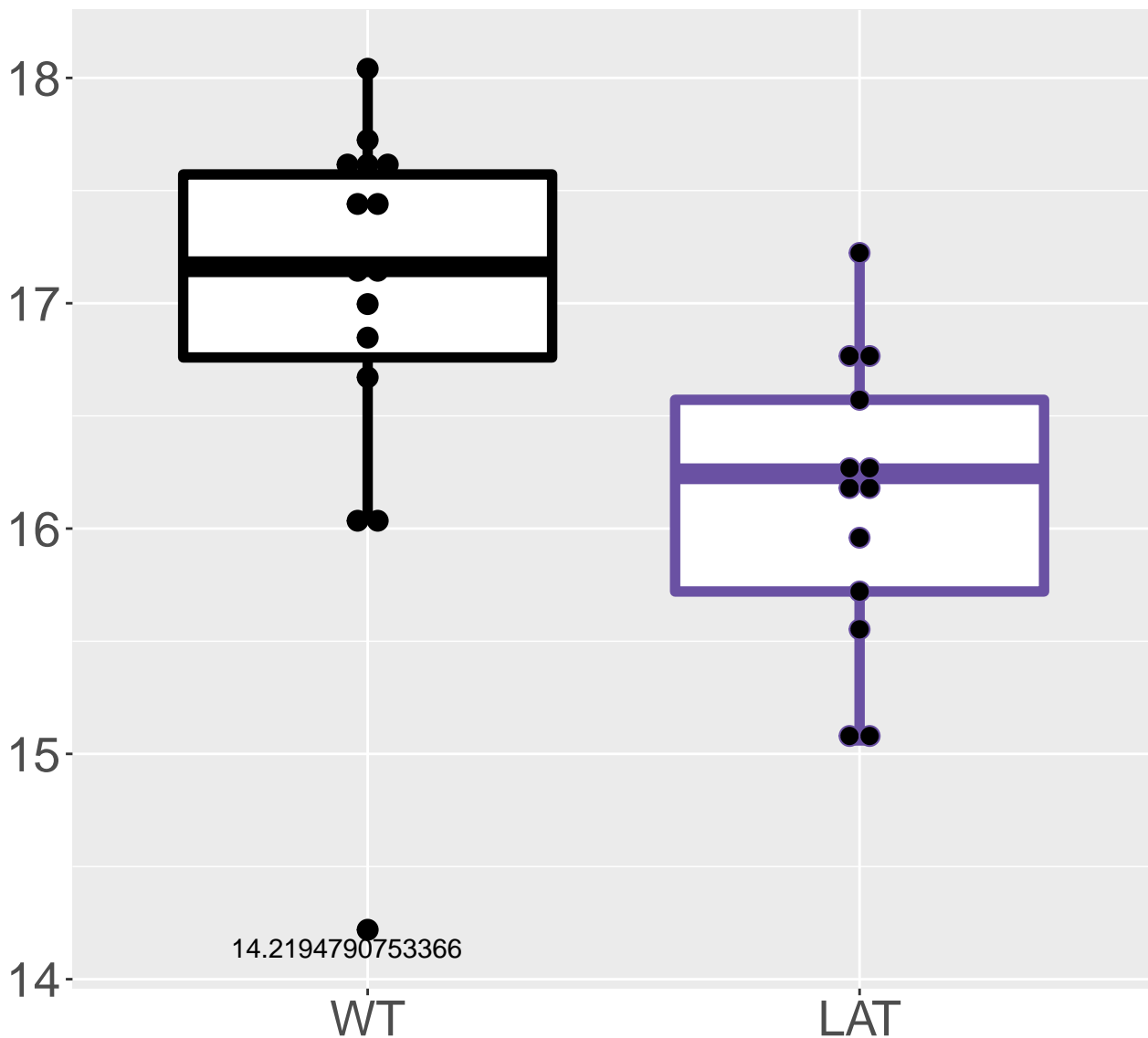


**M993.2396T599.02**  
**FDR = 0.029, FC = 0.37**

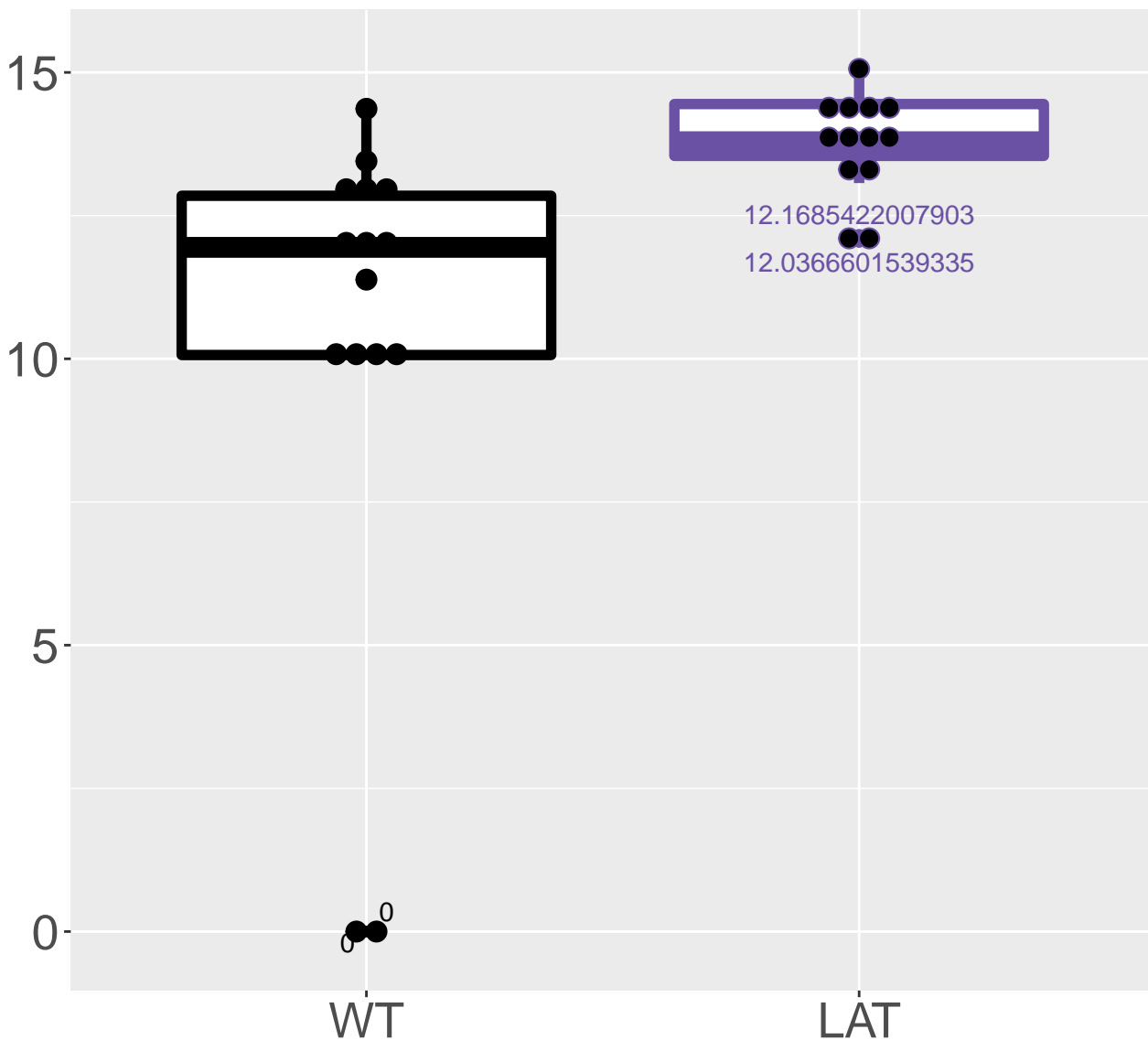


**M412.1103T407.63**

**FDR = 0.029, FC = -0.85**

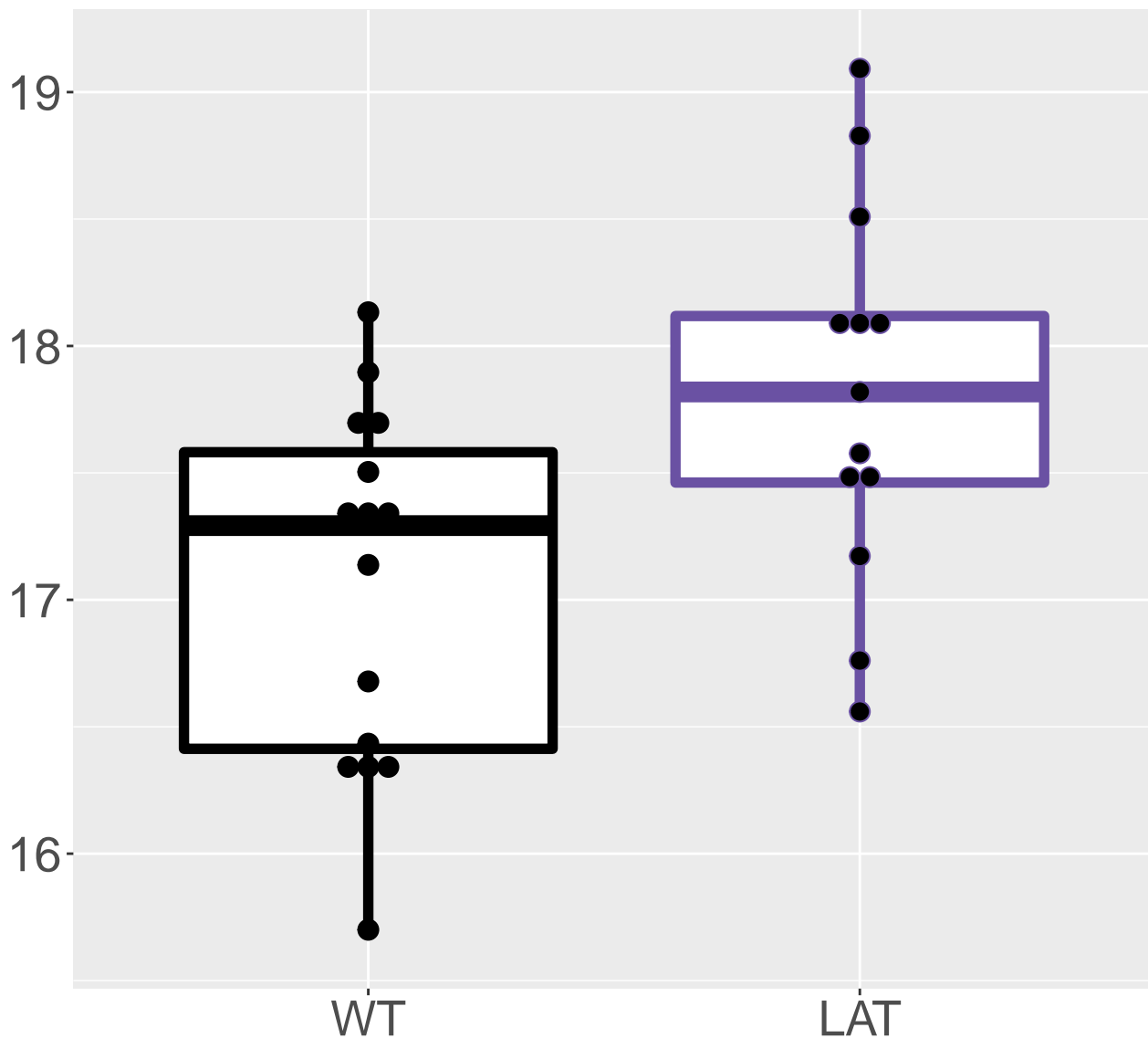


**FDR = 0.029, FC = 3.5**



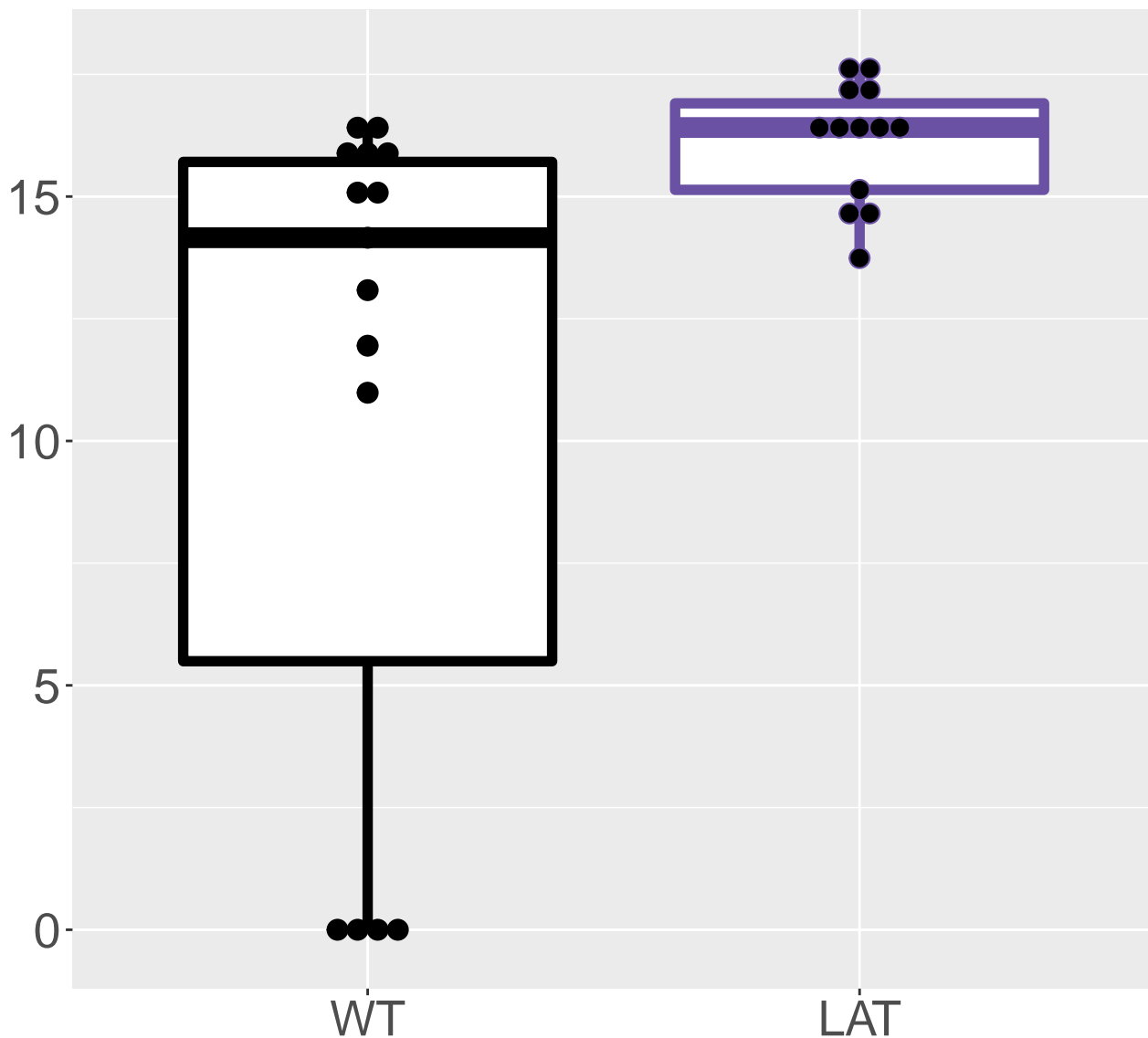
**M349.0546T578.88**

**FDR = 0.03, FC = 0.75**



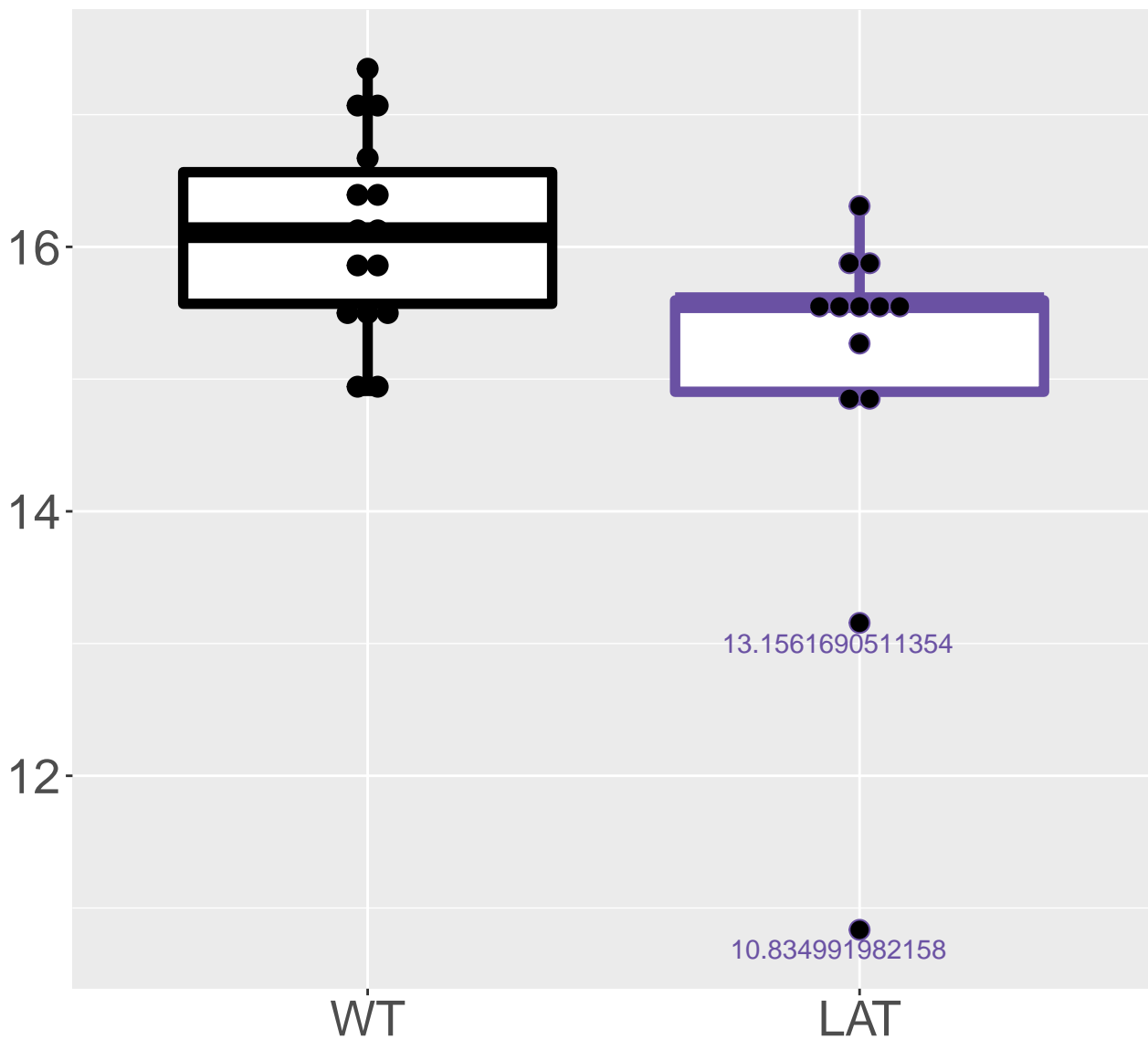
**M913.244T529.83**

**FDR = 0.03, FC = 5.4**



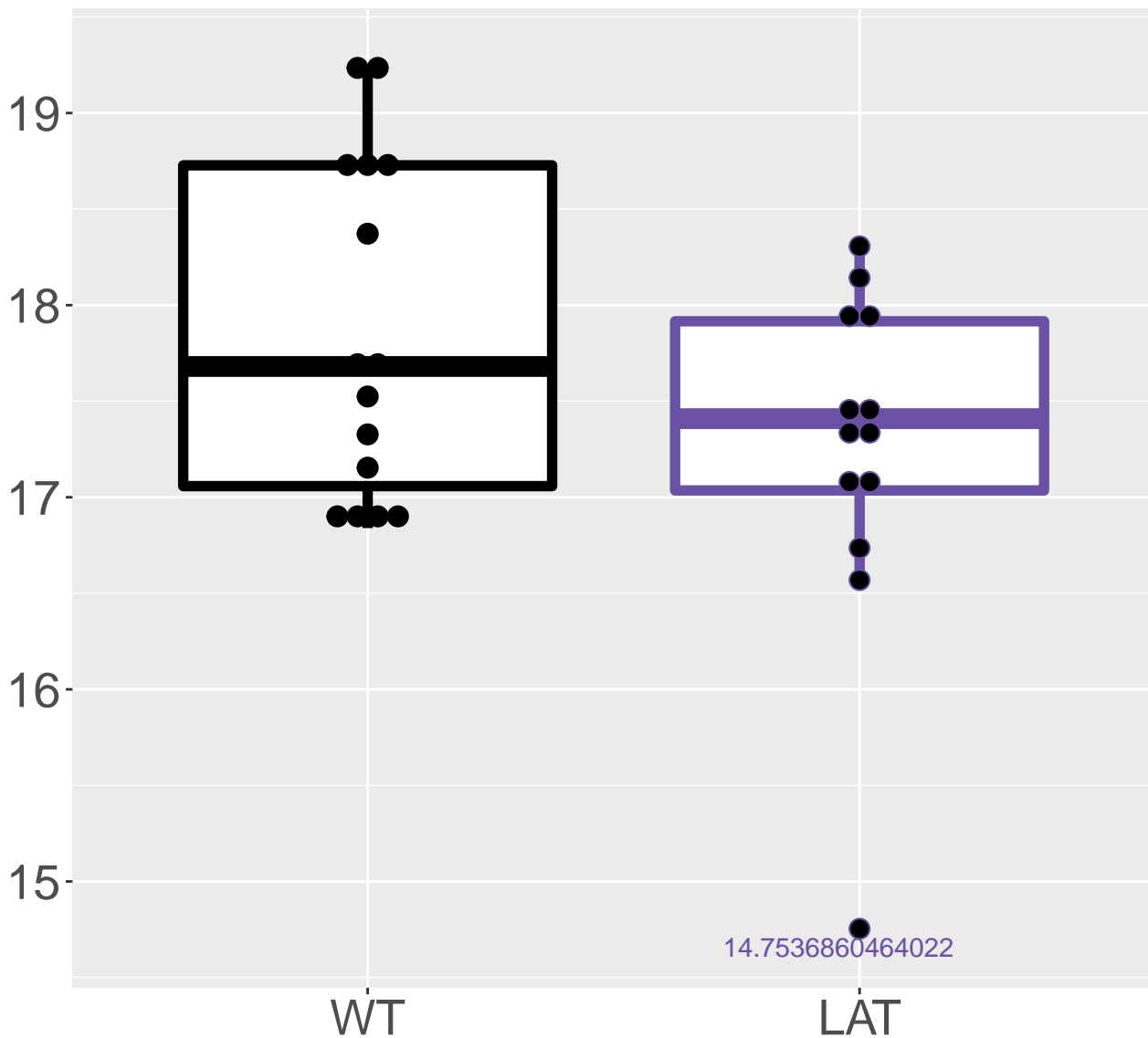
**M103.0595T313.92**

**FDR = 0.03, FC = -1.1**



**M510.4614T78.71**

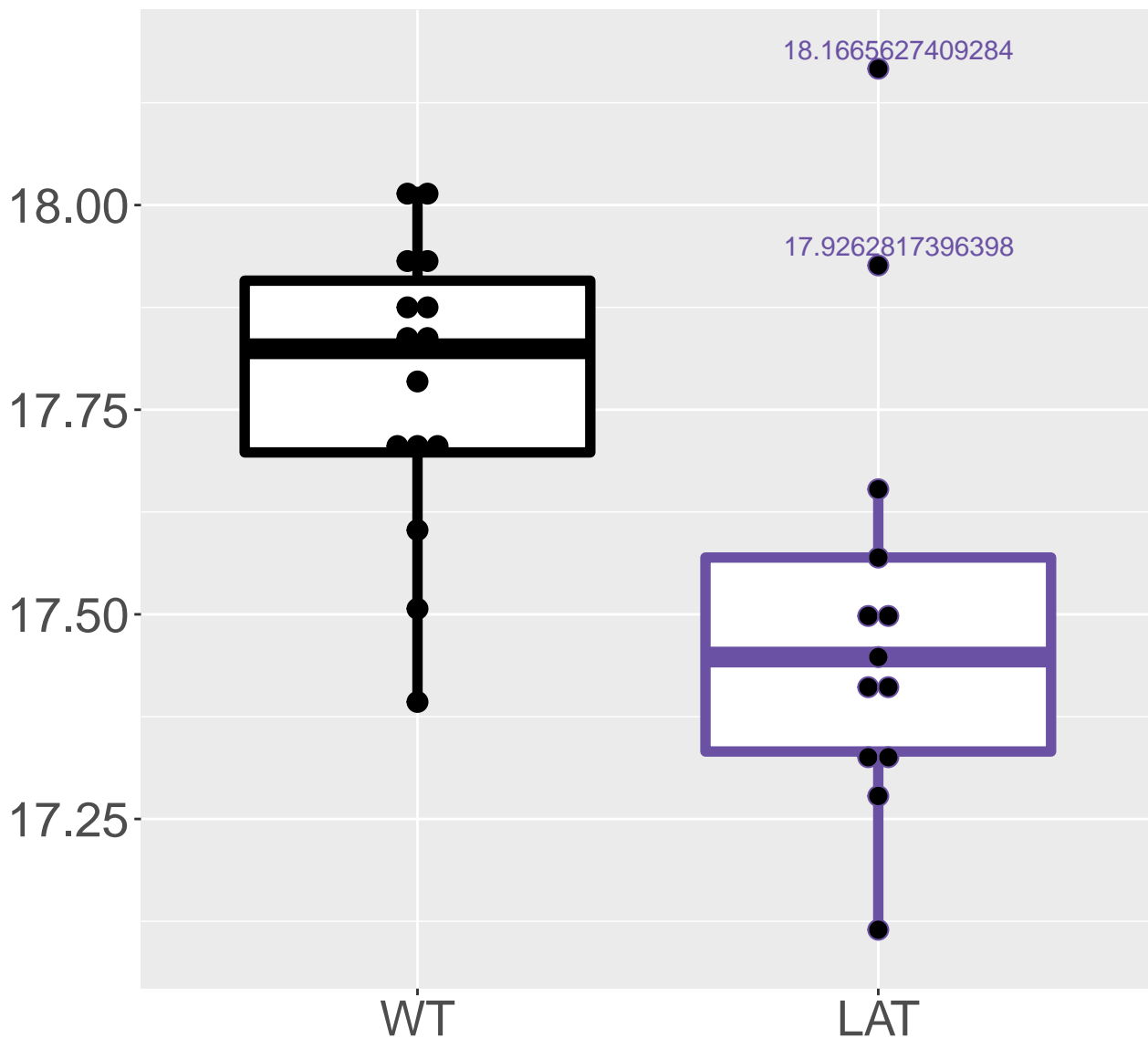
**FDR = 0.03, FC = -0.63, sex\*\***



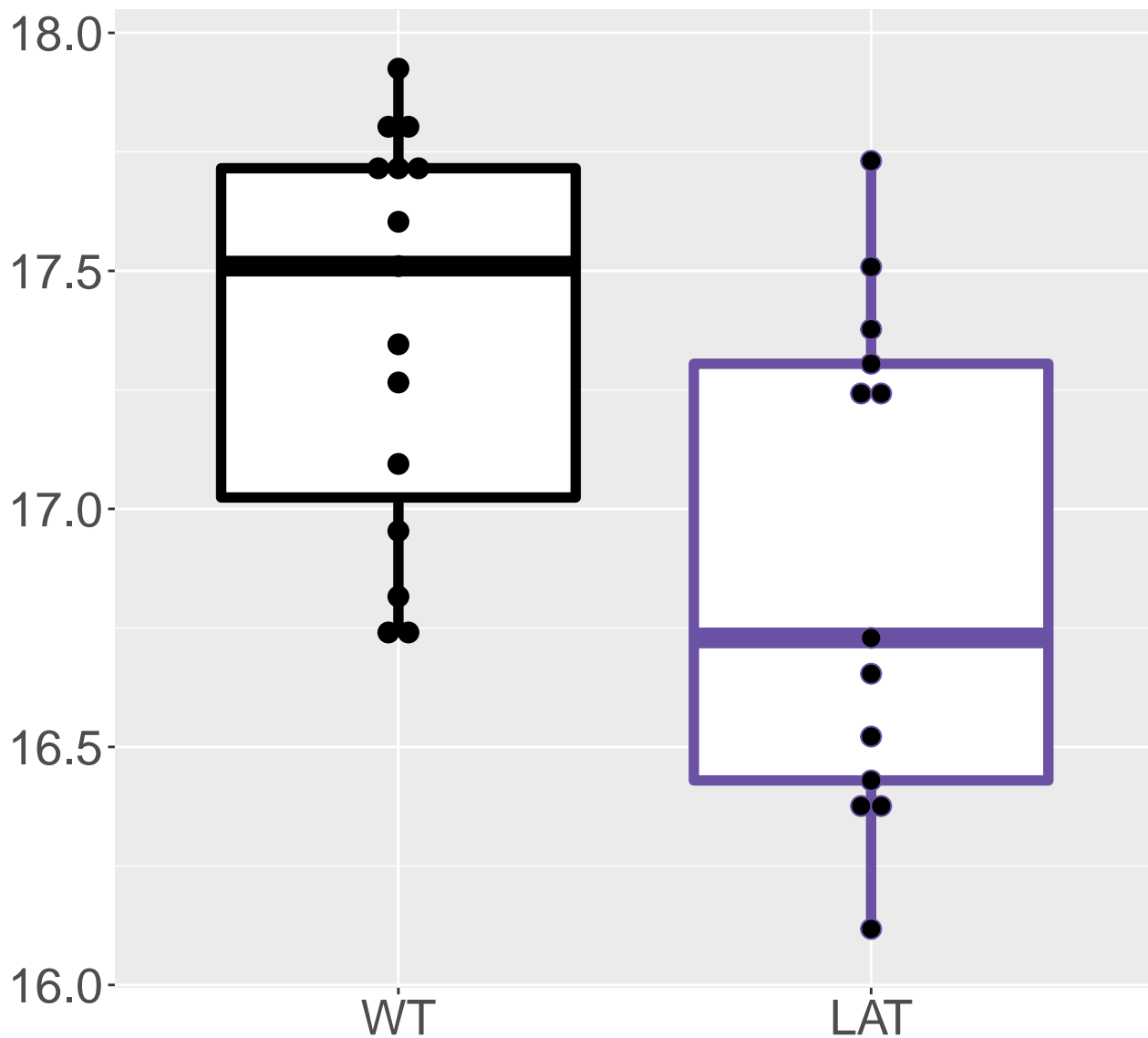


**M232.673T78.29**

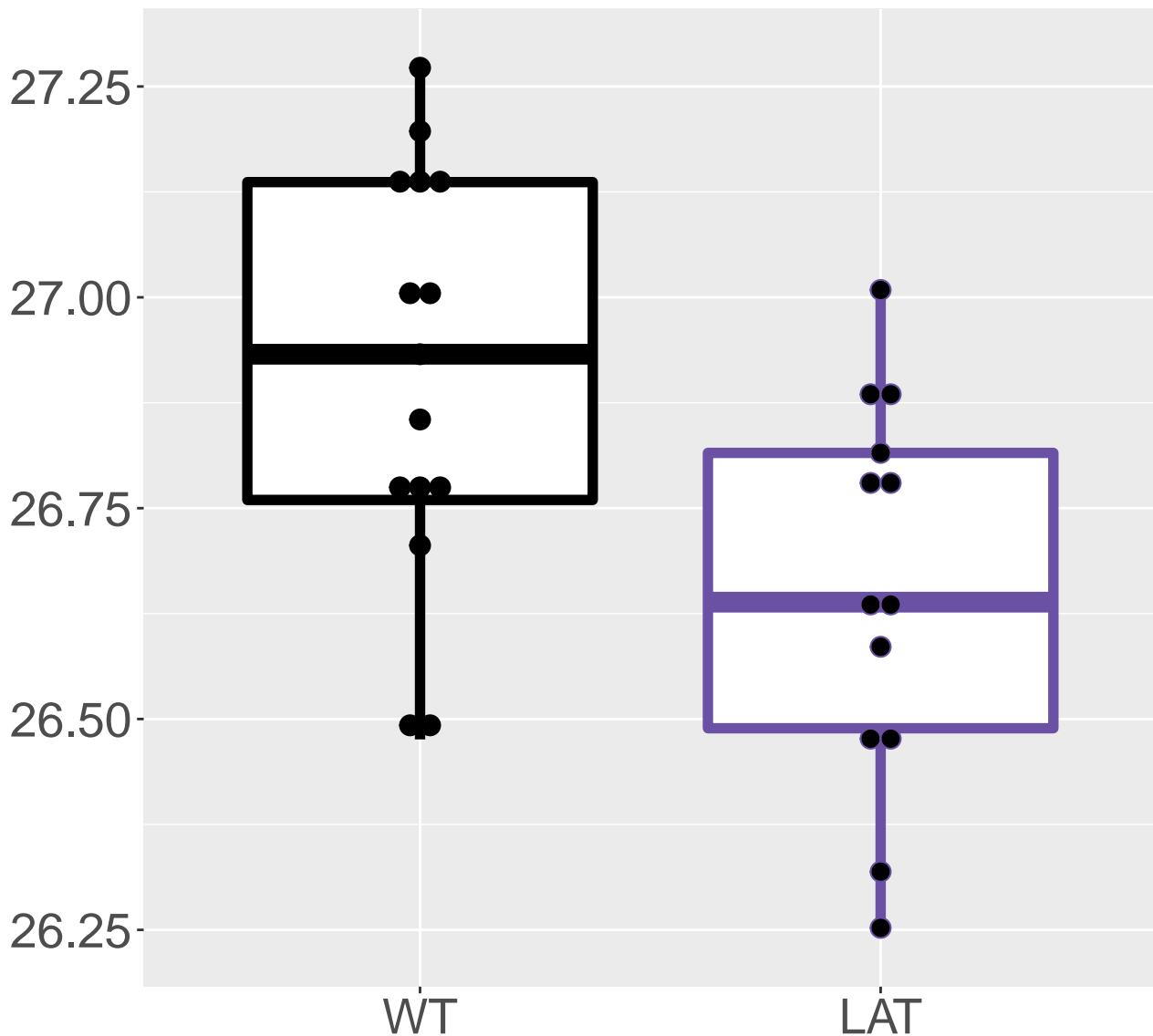
**FDR = 0.03, FC = -0.27**



**M141.0221T573.16**  
**FDR = 0.03, FC = -0.49**

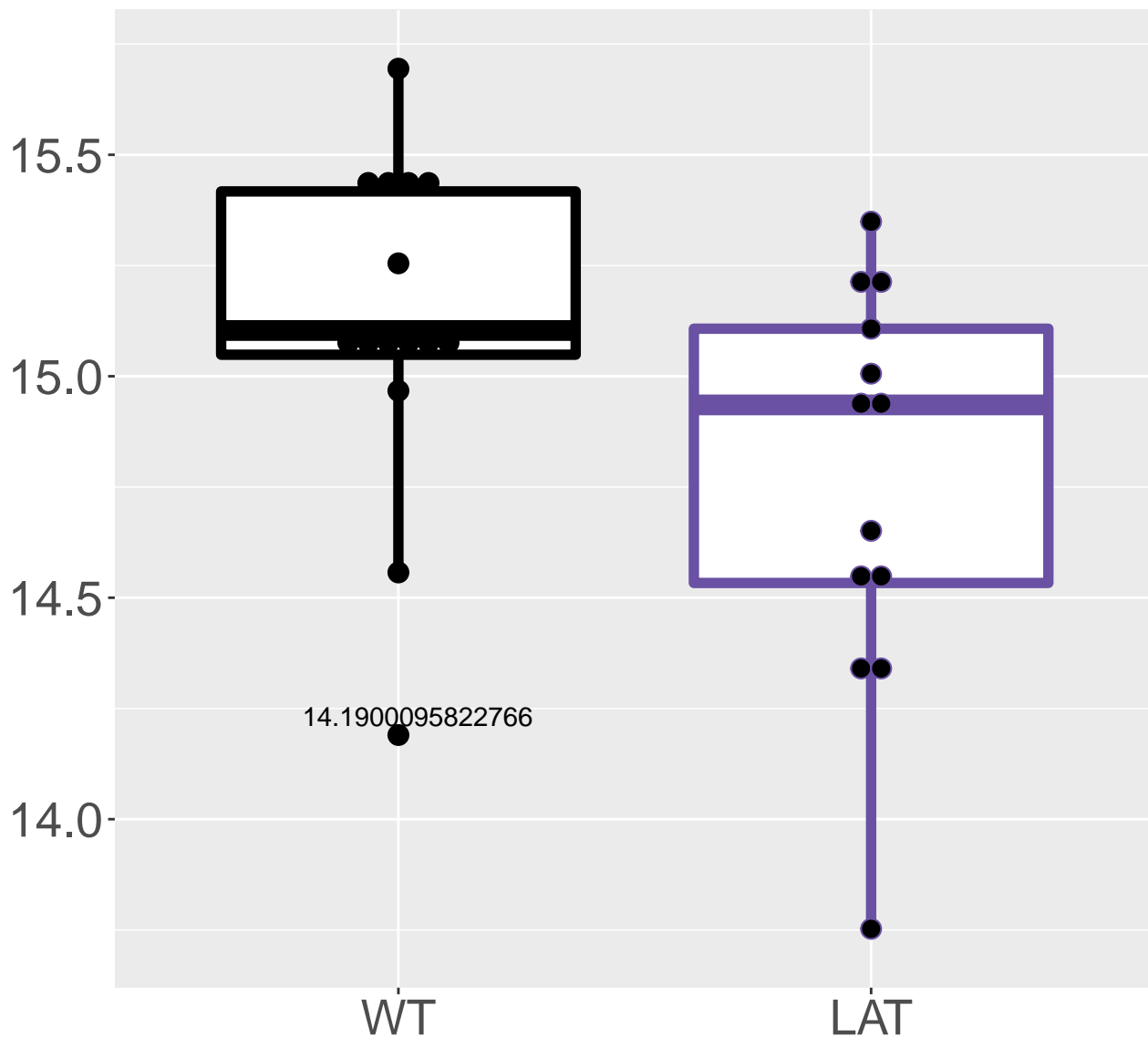


**D-Pyroglutamic acid;5-oxo-D-proline|L-Pyr**  
**FDR = 0.03, FC = -0.26**



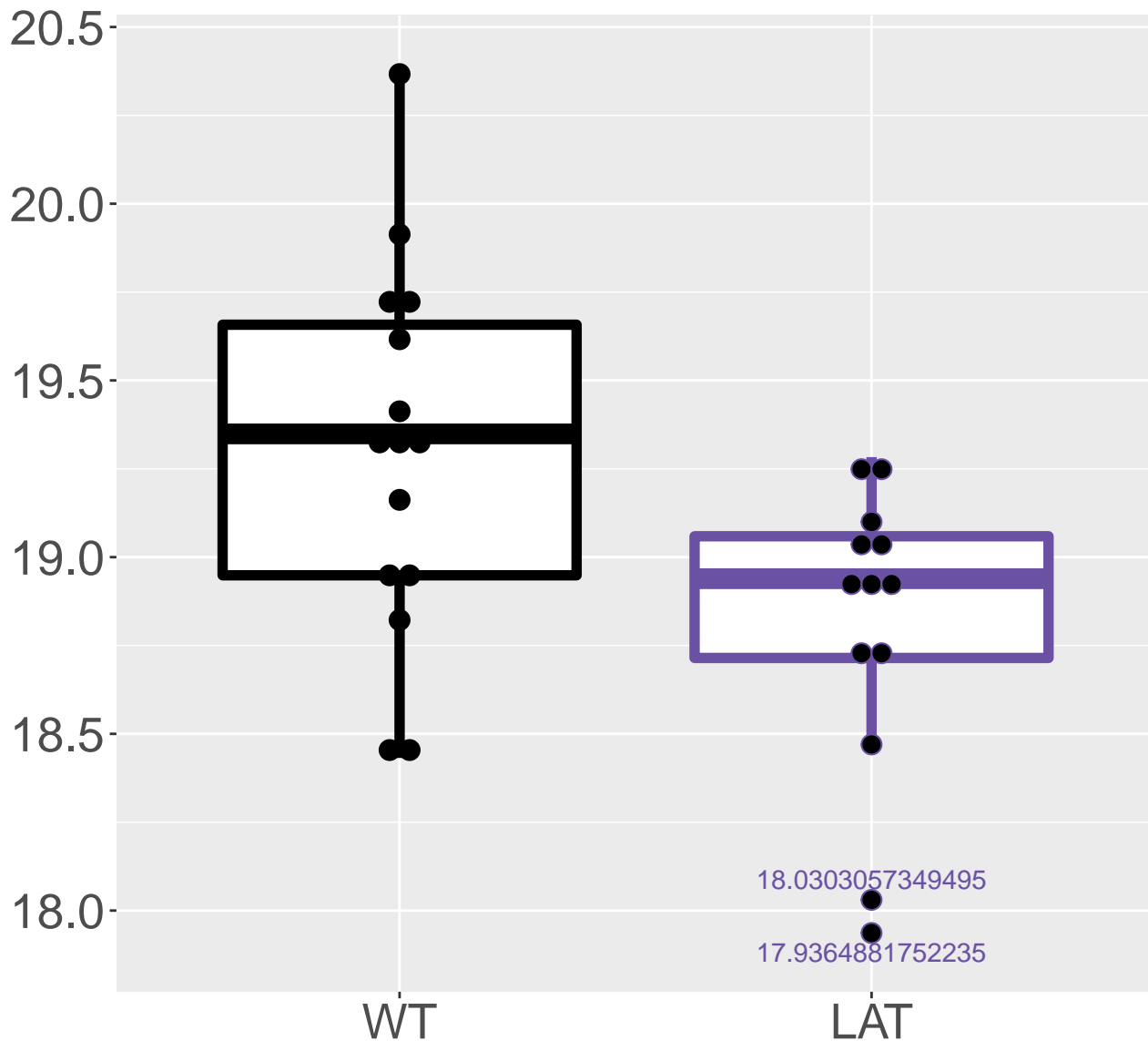
**M801.7365T618.35**

**FDR = 0.031, FC = -0.36, sex\***

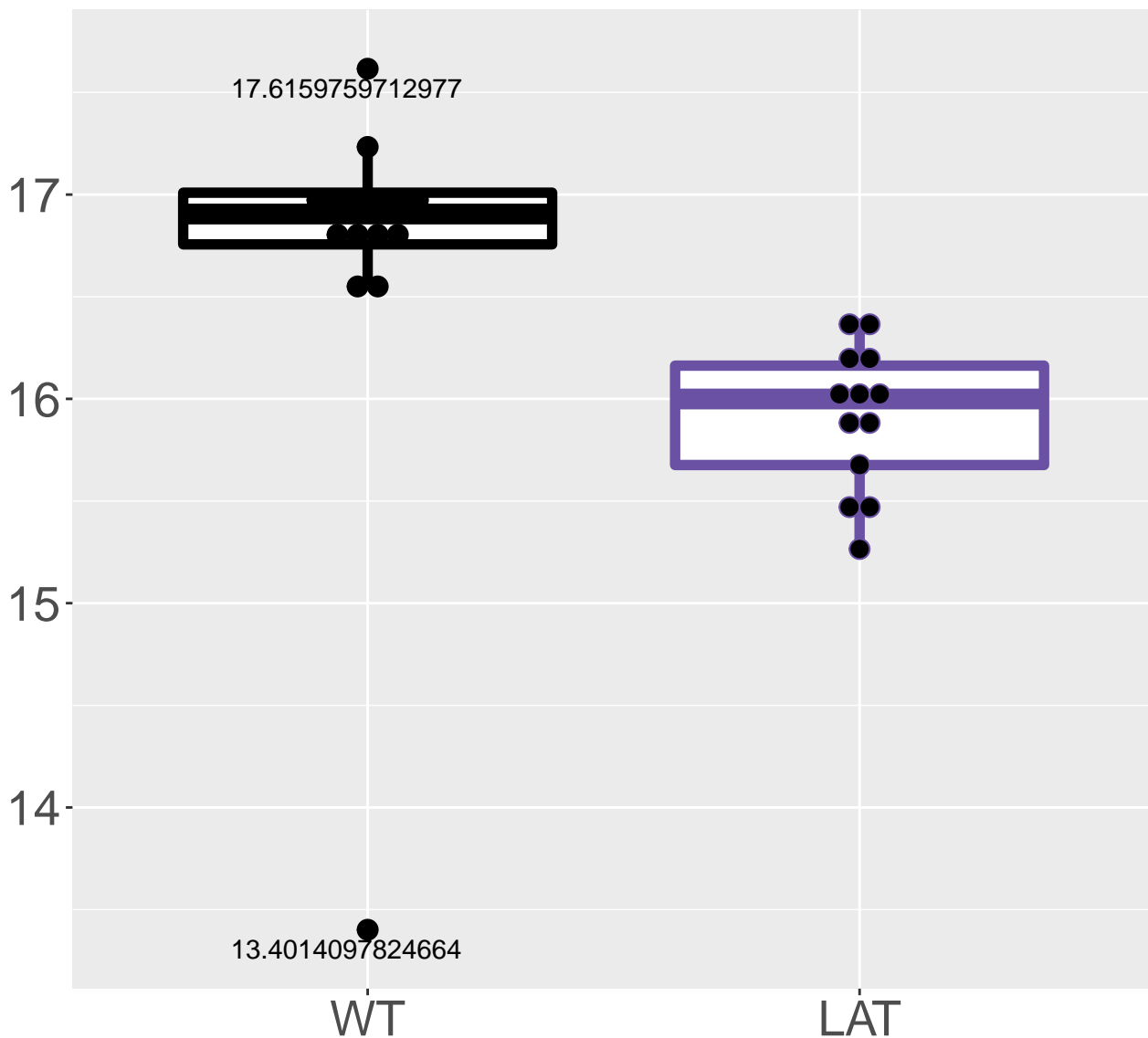


**M302.1008T263.6**

**FDR = 0.031, FC = -0.51**

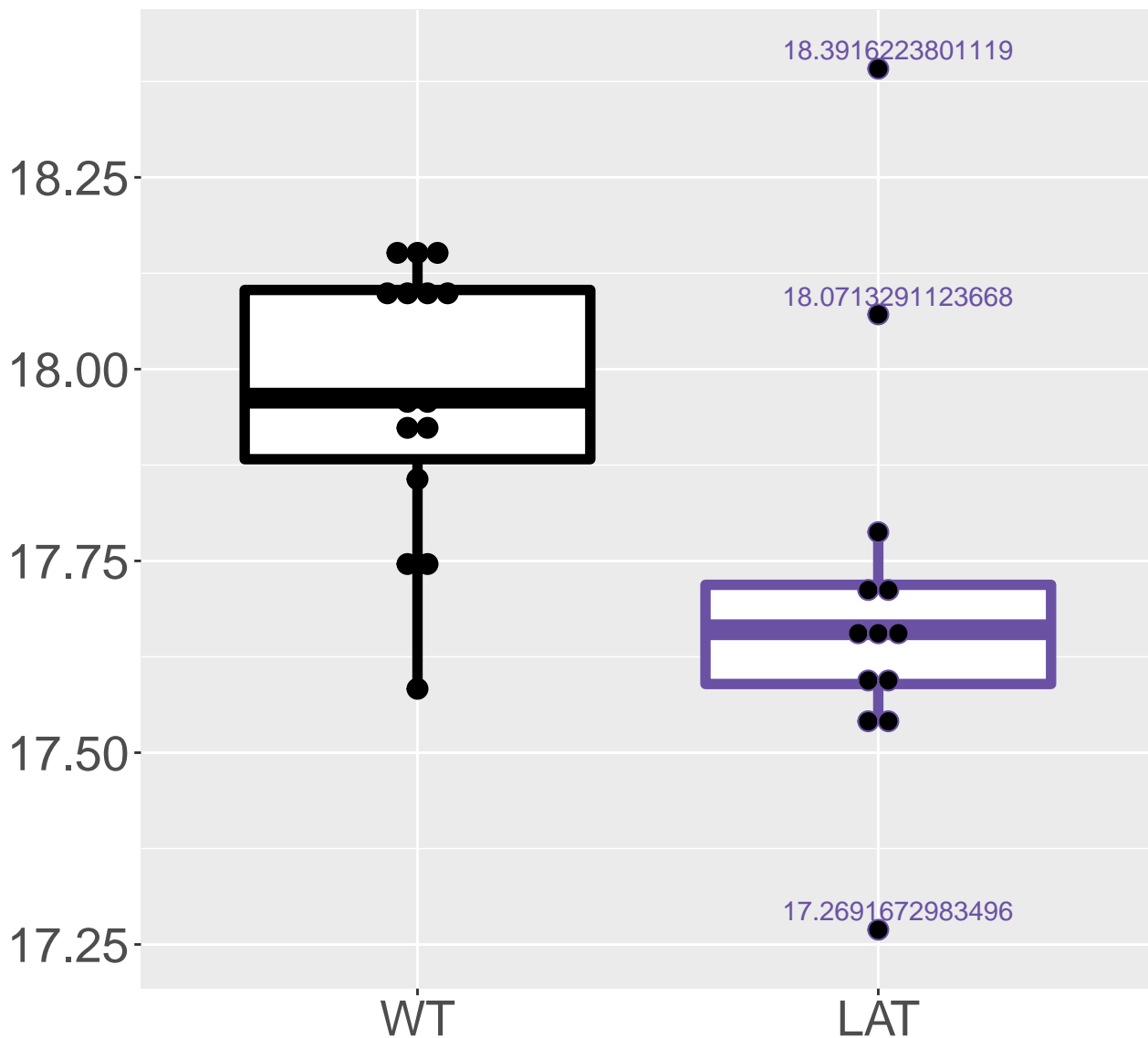


**FDR = 0.031, FC = -0.79**



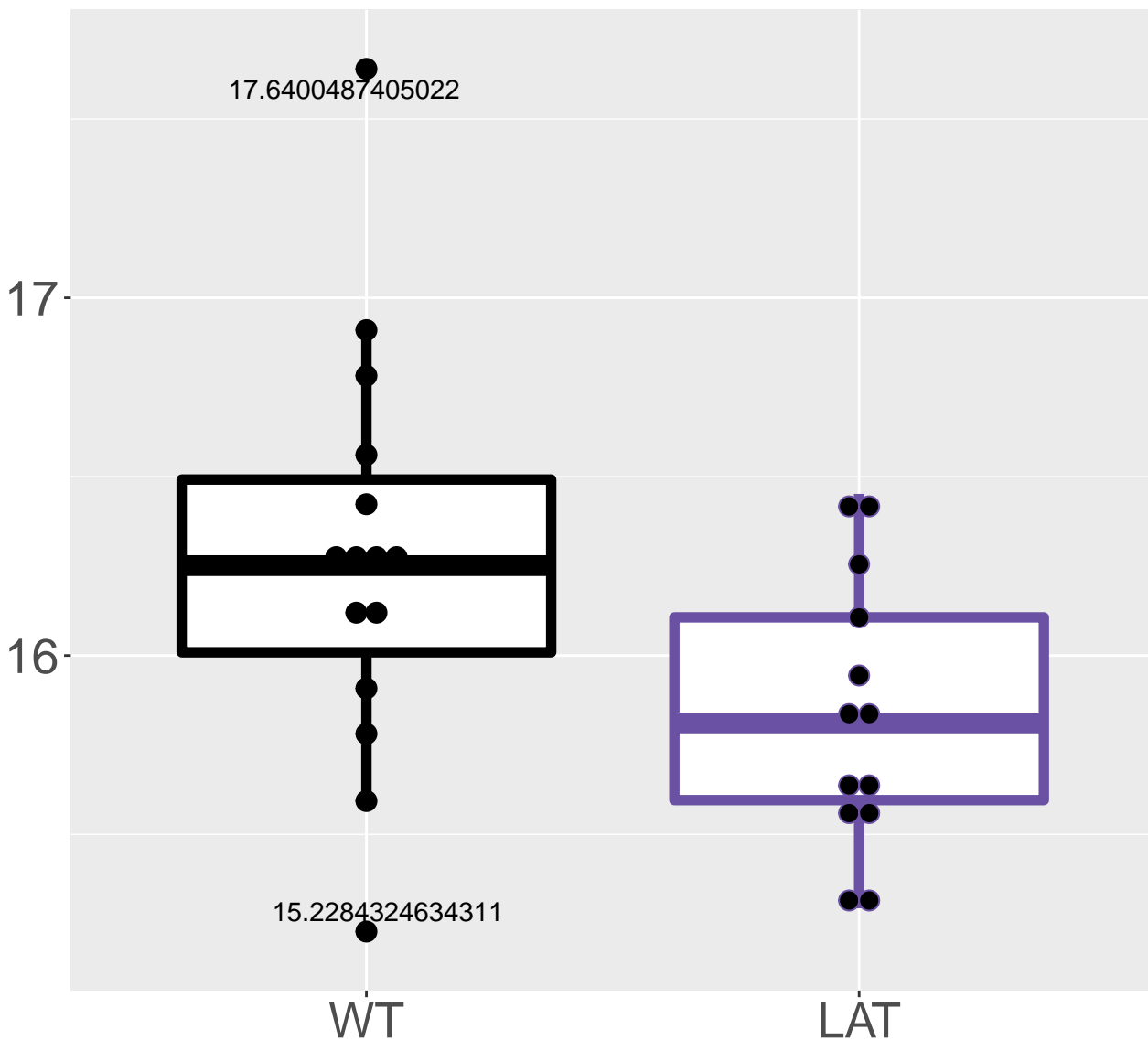
**M205.9252T78.31**

**FDR = 0.032, FC = -0.26**



**M342.1058T336.75**

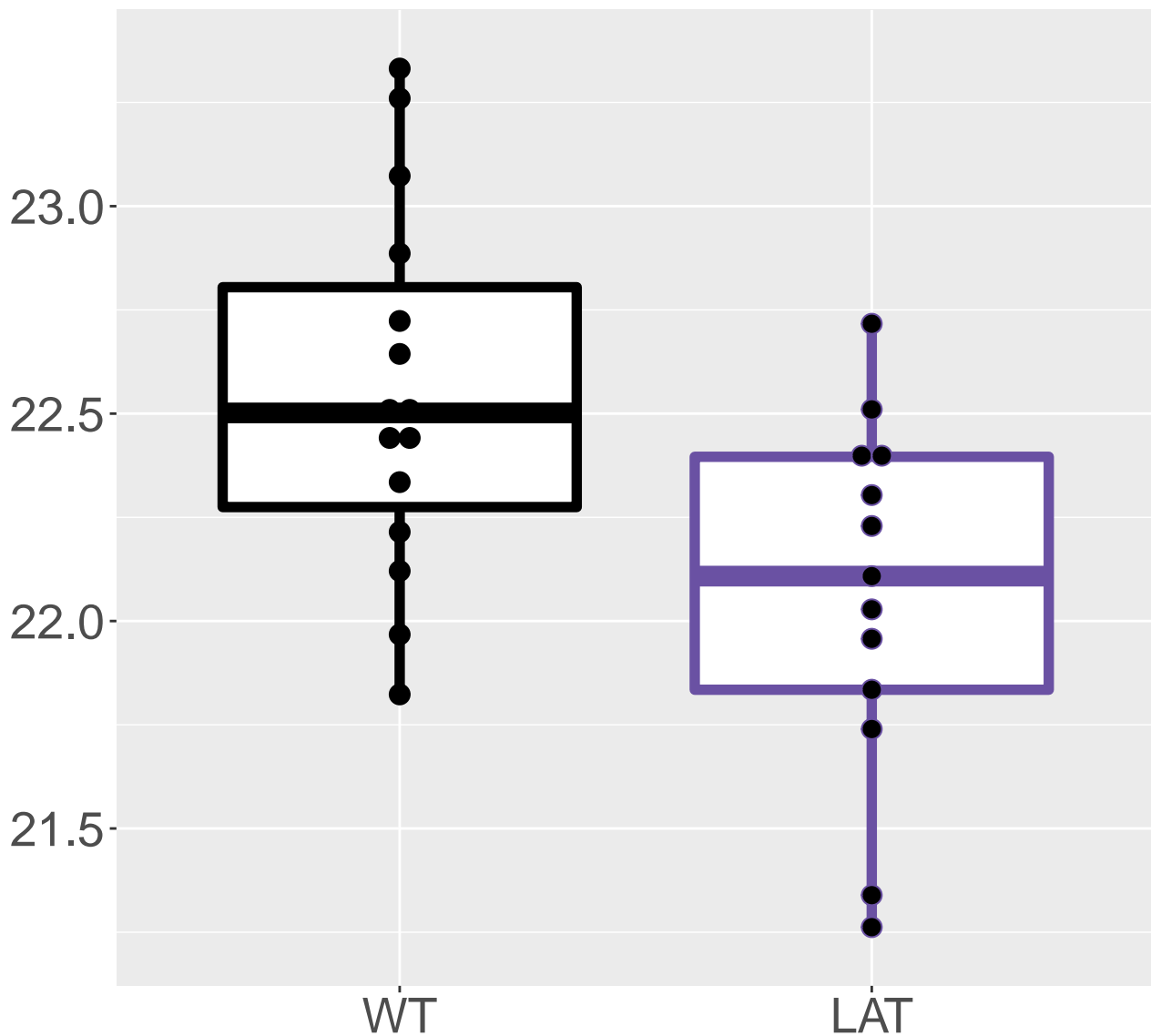
**FDR = 0.032, FC = -0.44**





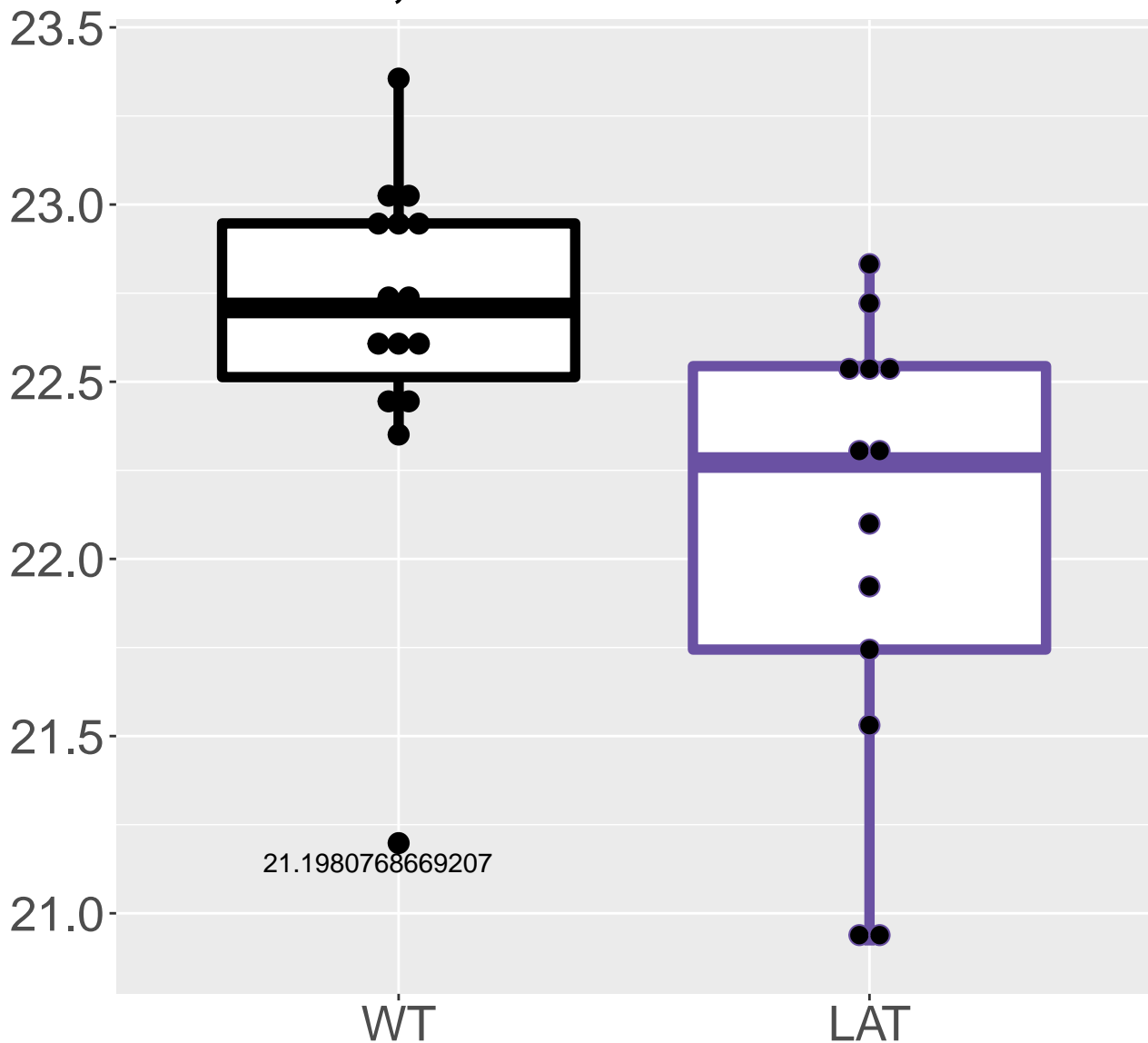
**M257.0783T280.82**

**FDR = 0.032, FC = -0.49**



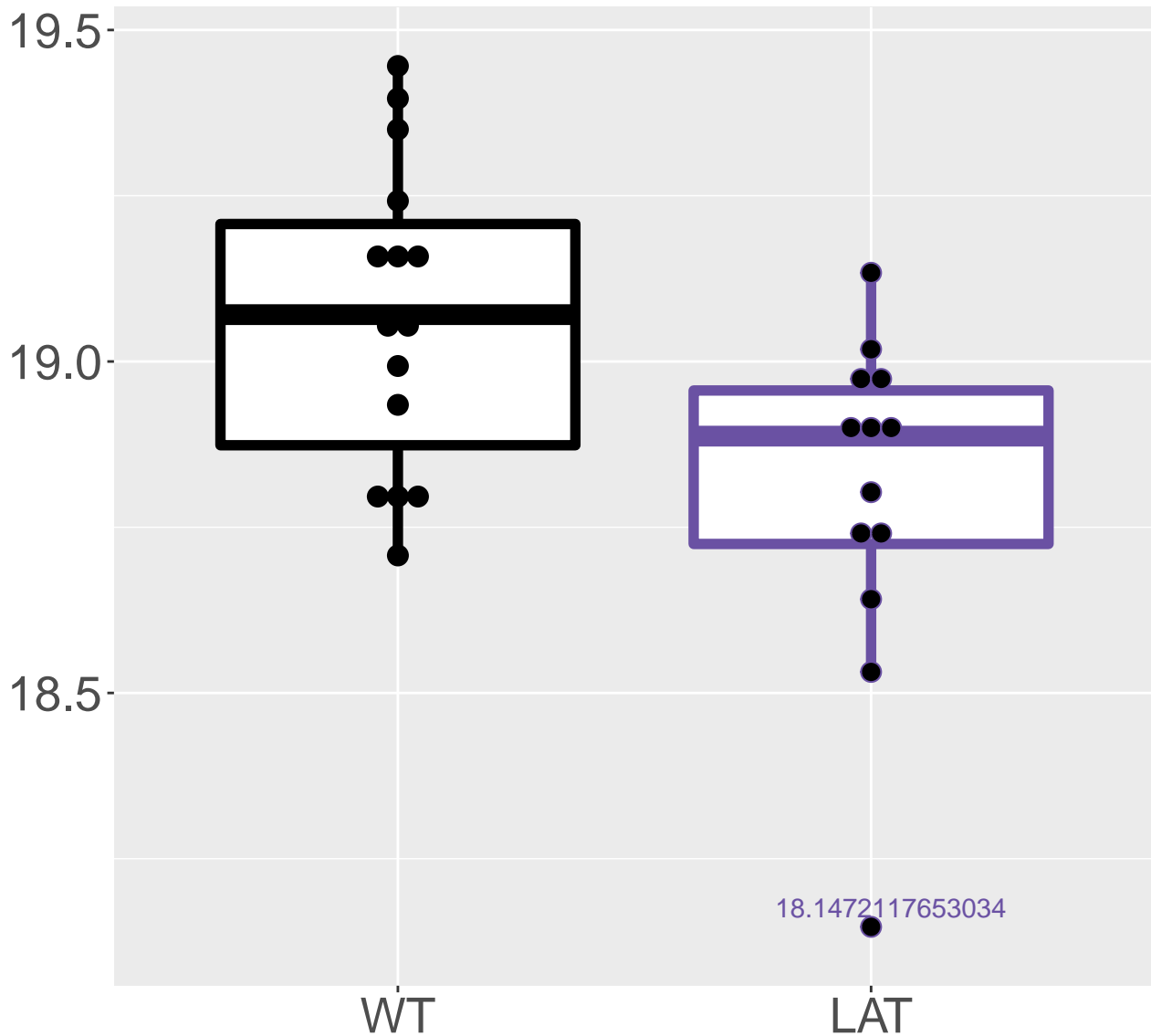
**M136.0345T264.1**

**FDR = 0.032, FC = -0.59**

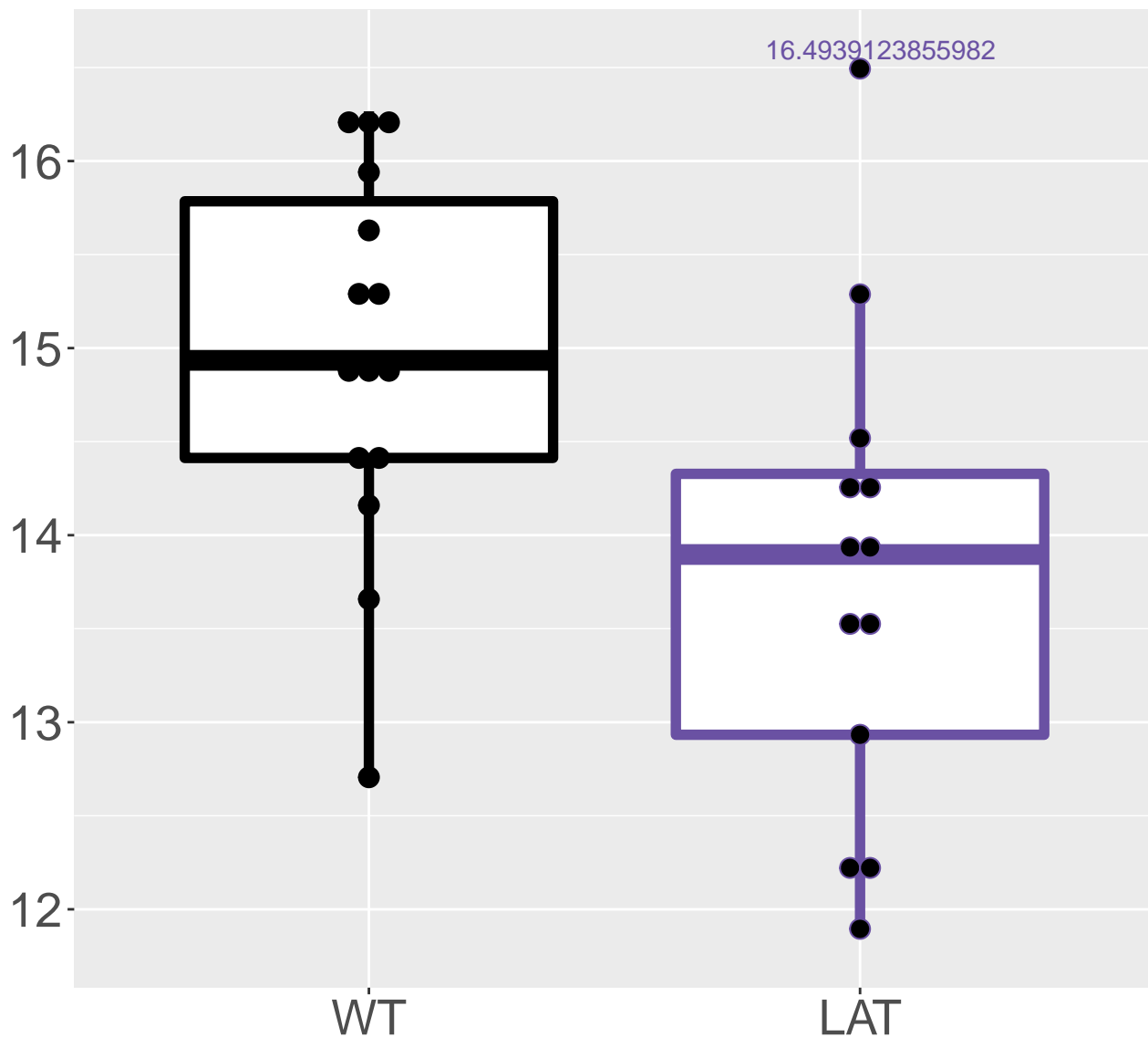


**M303.0872T438.55**

**FDR = 0.032, FC = -0.27**

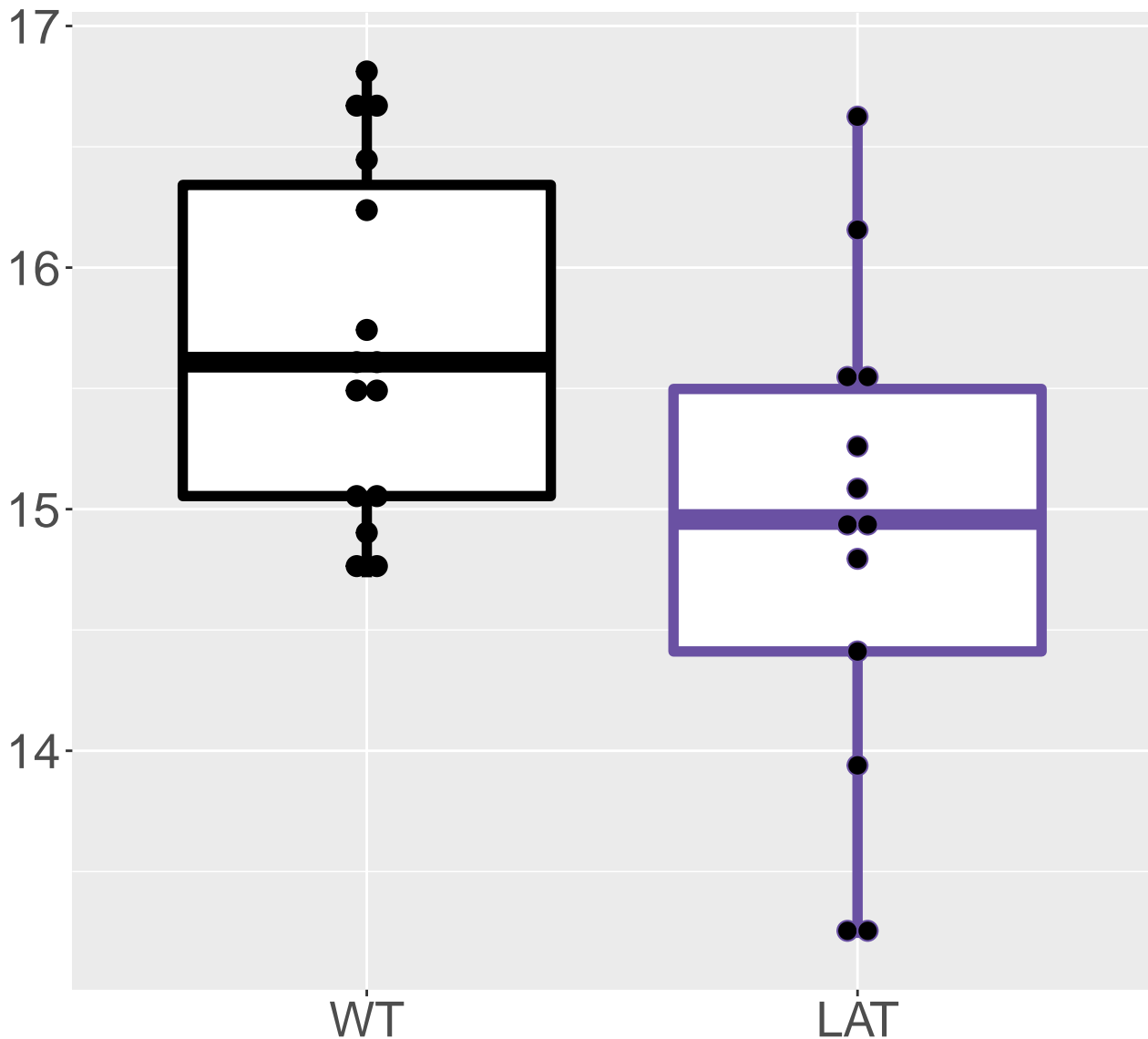


**M363.1144T607.24\_2**  
**FDR = 0.033, FC = -1.2**



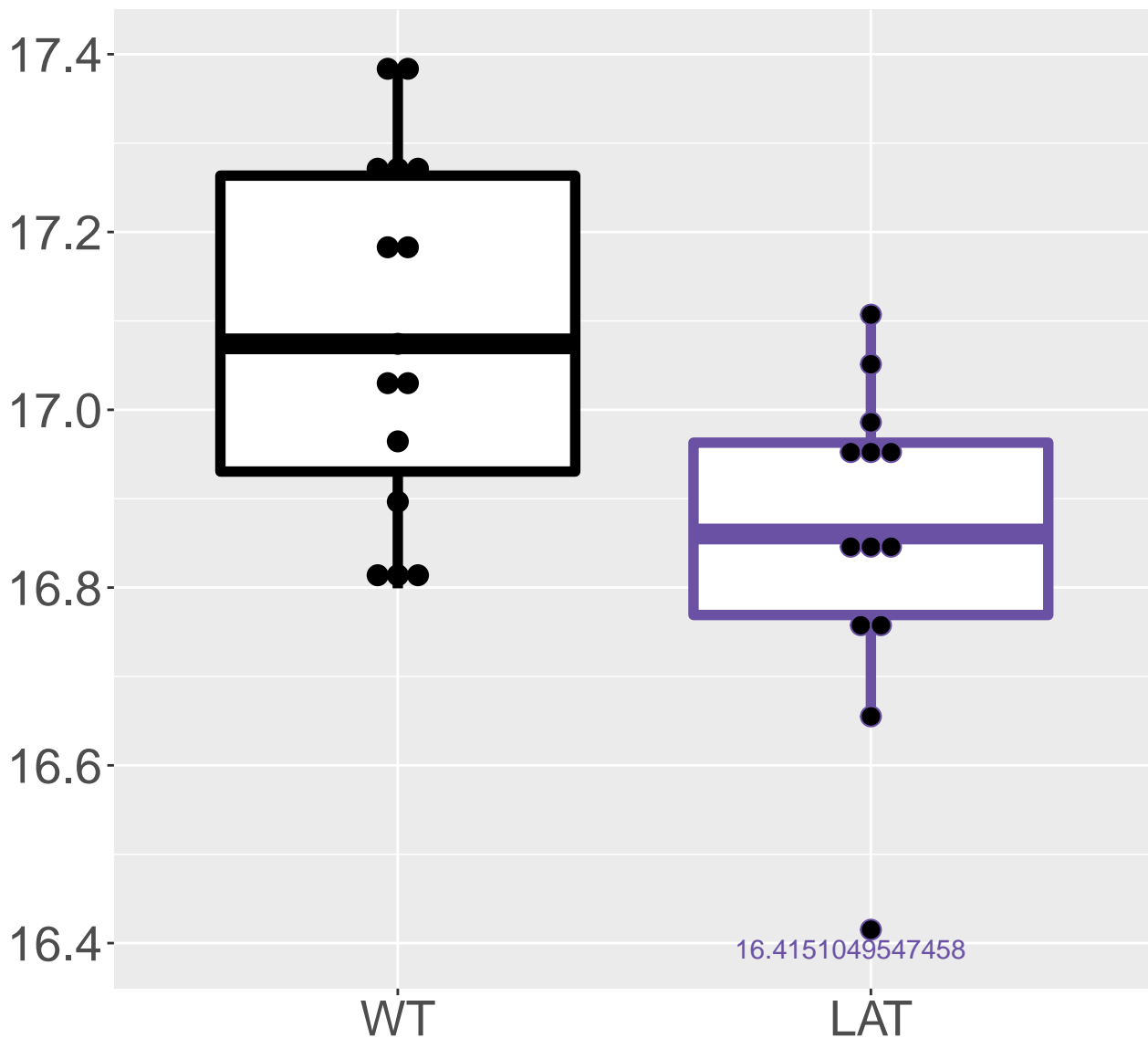
**M837.2284T564.37**

**FDR = 0.033, FC = -0.78**

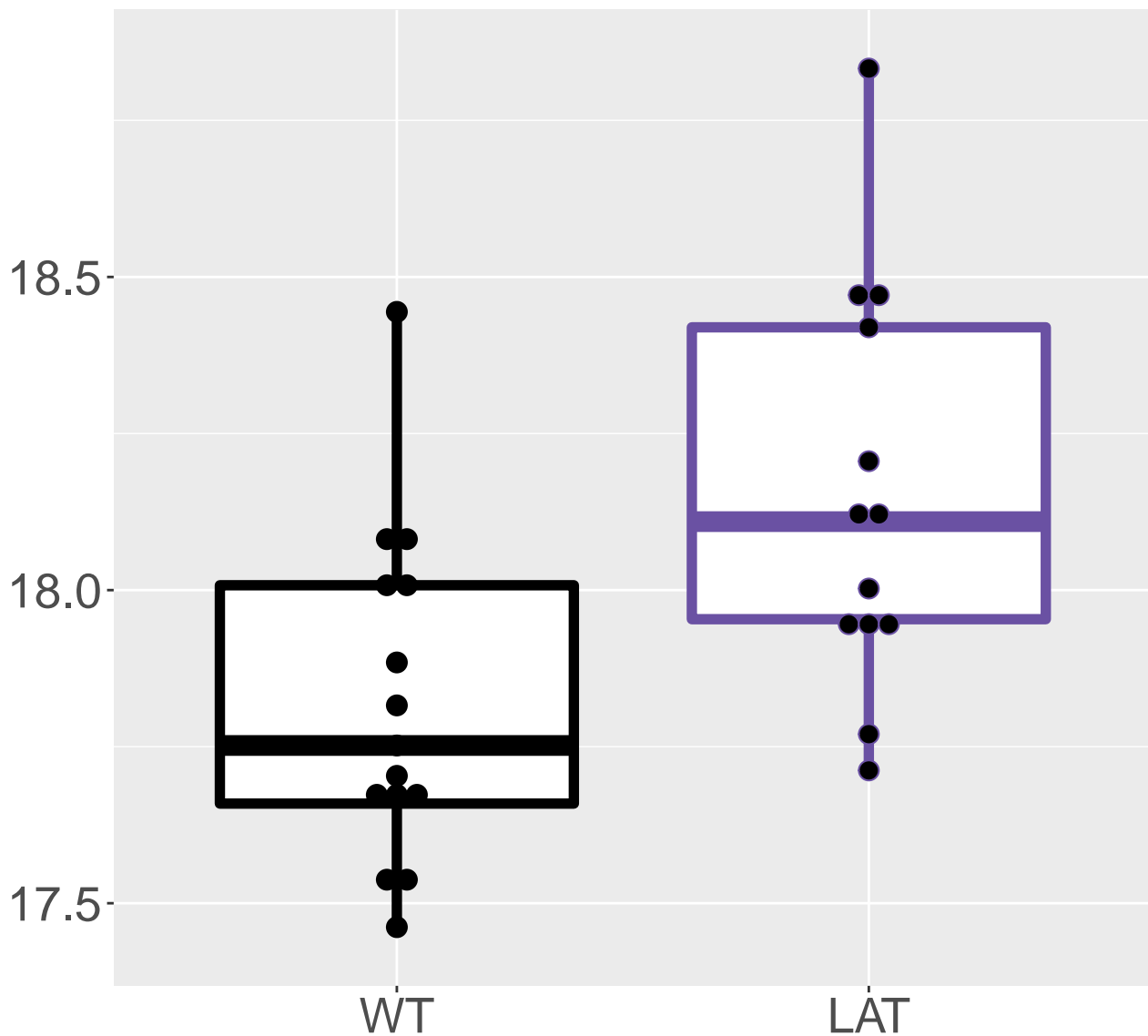


**M118.0511T1210.2**

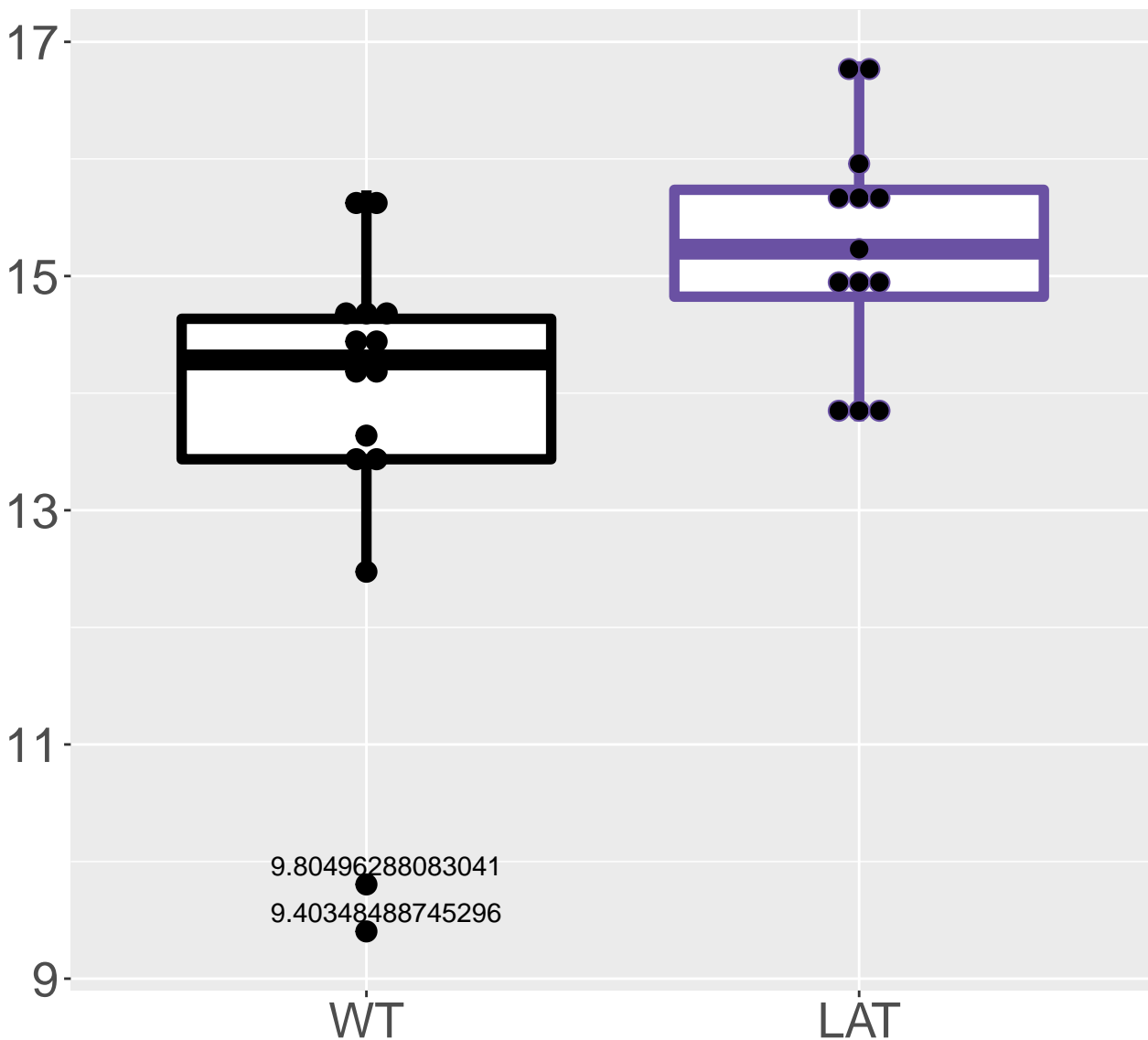
**FDR = 0.033, FC = -0.24**



**Allantoic acid**  
**FDR = 0.033, FC = 0.33**



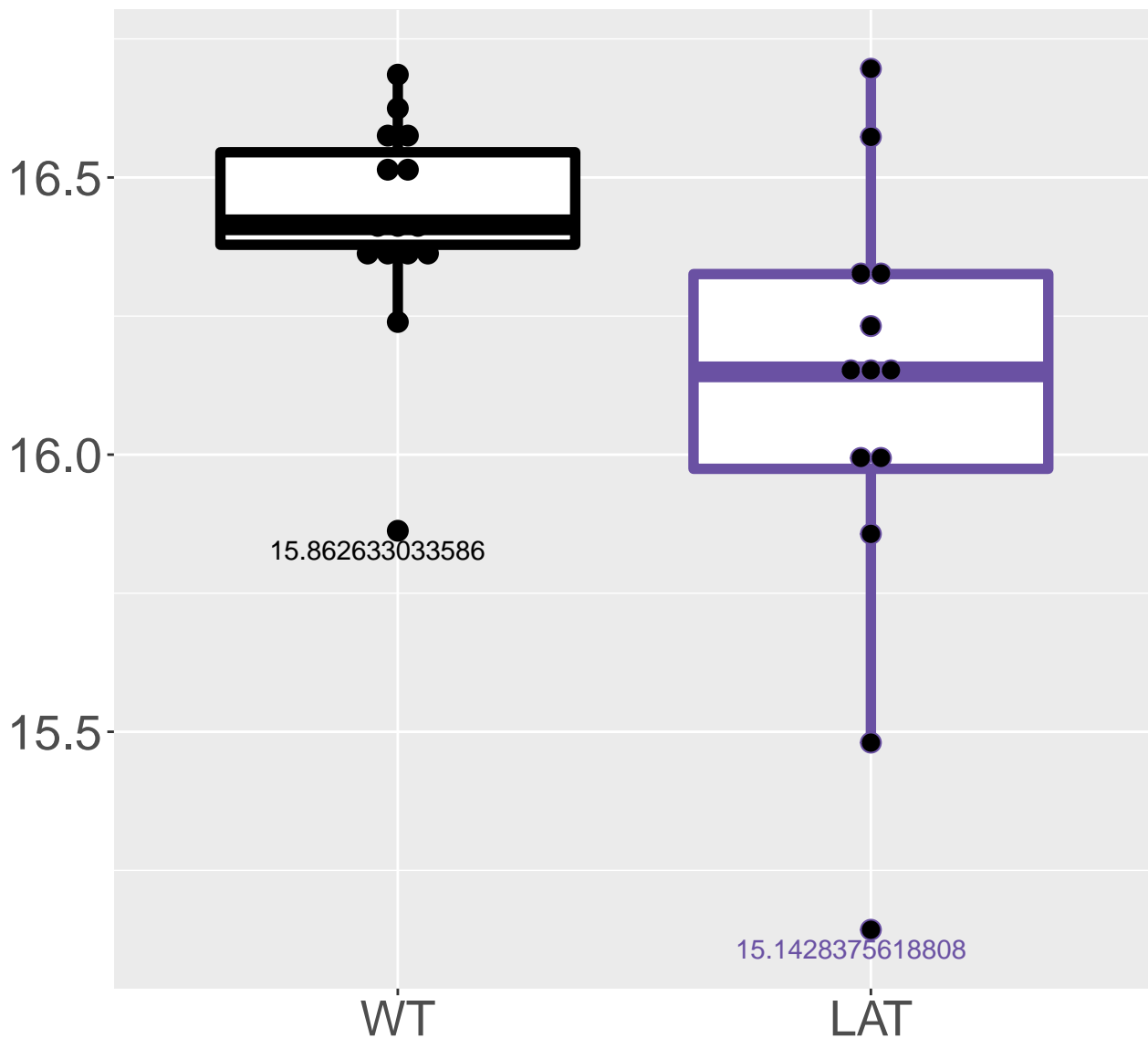
**M246.992T659.75**  
**FDR = 0.033, FC = 1.6**



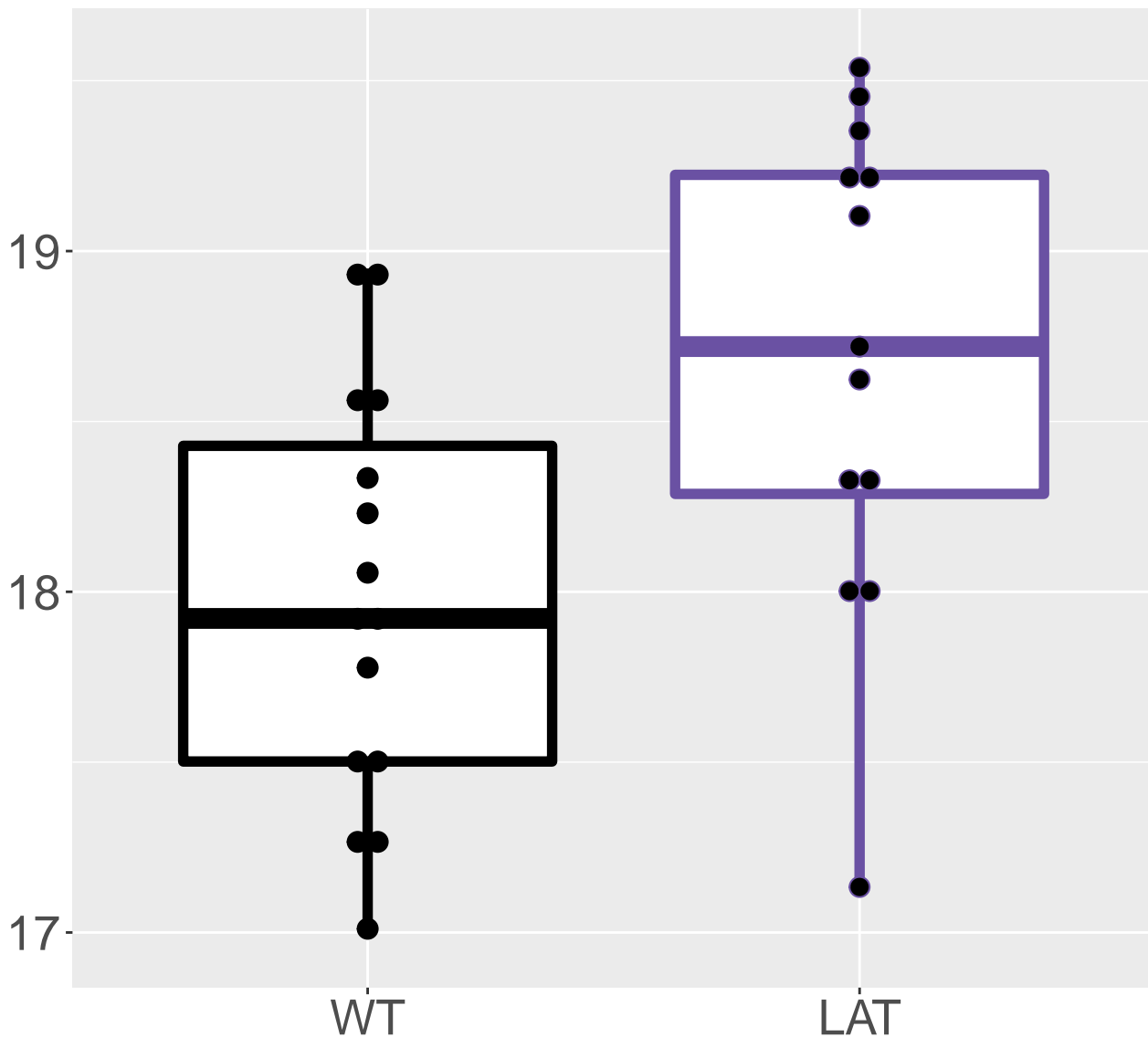


**M195.9508T551.26**

**FDR = 0.033, FC = -0.34**

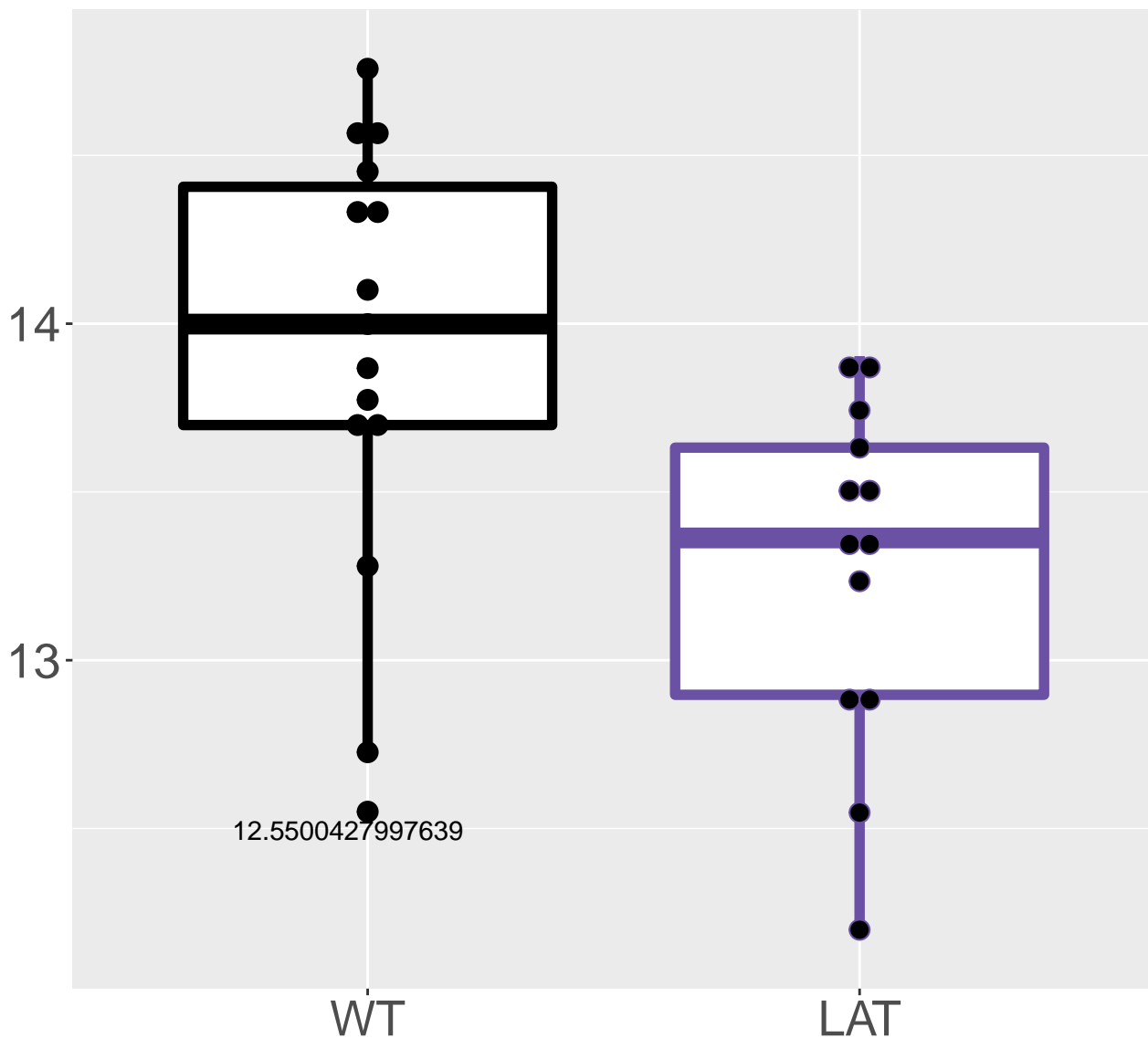


**M917.2205T596.11**  
**FDR = 0.033, FC = 0.71**

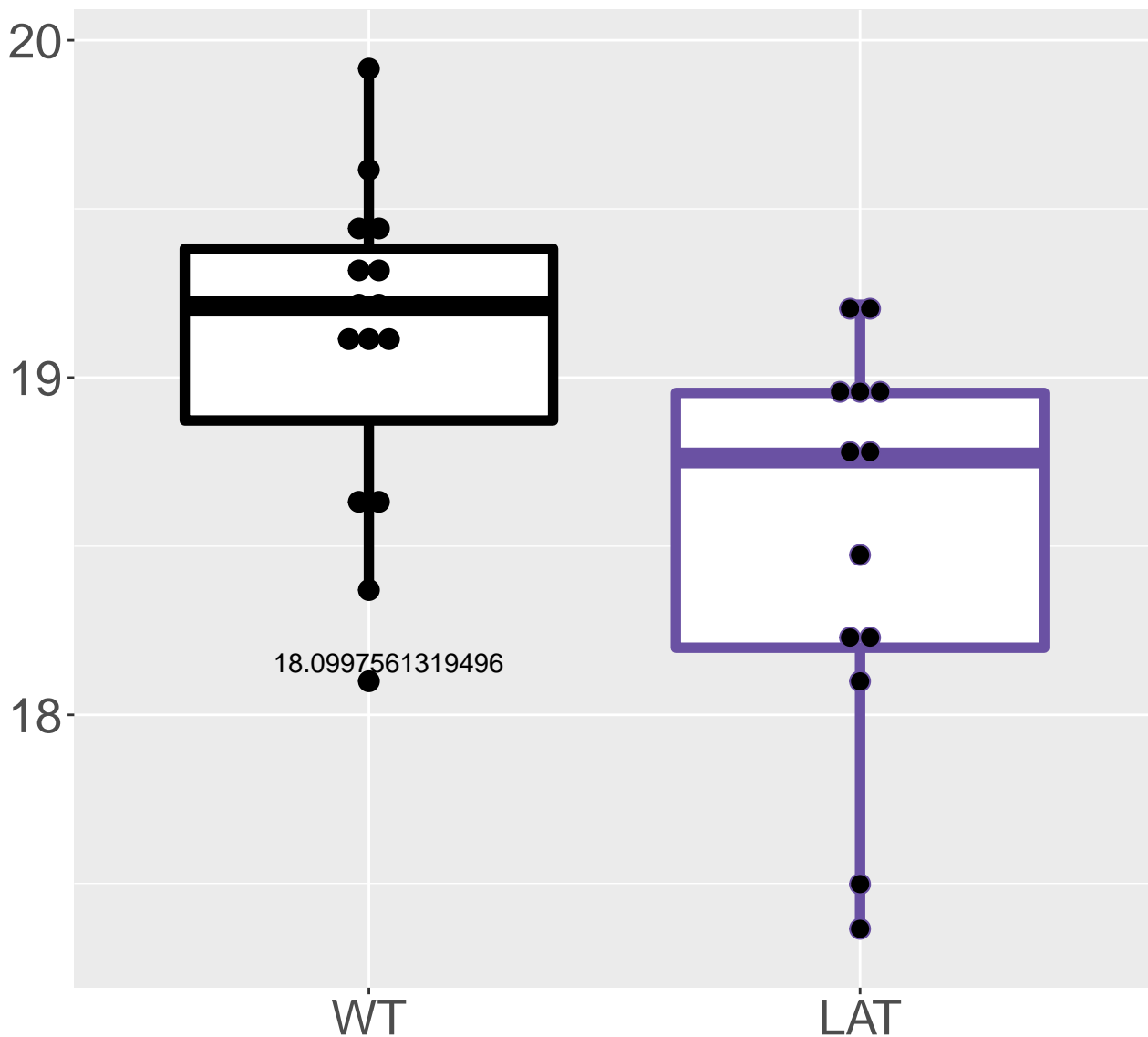


**M360.1301T329.19**

**FDR = 0.033, FC = -0.64**

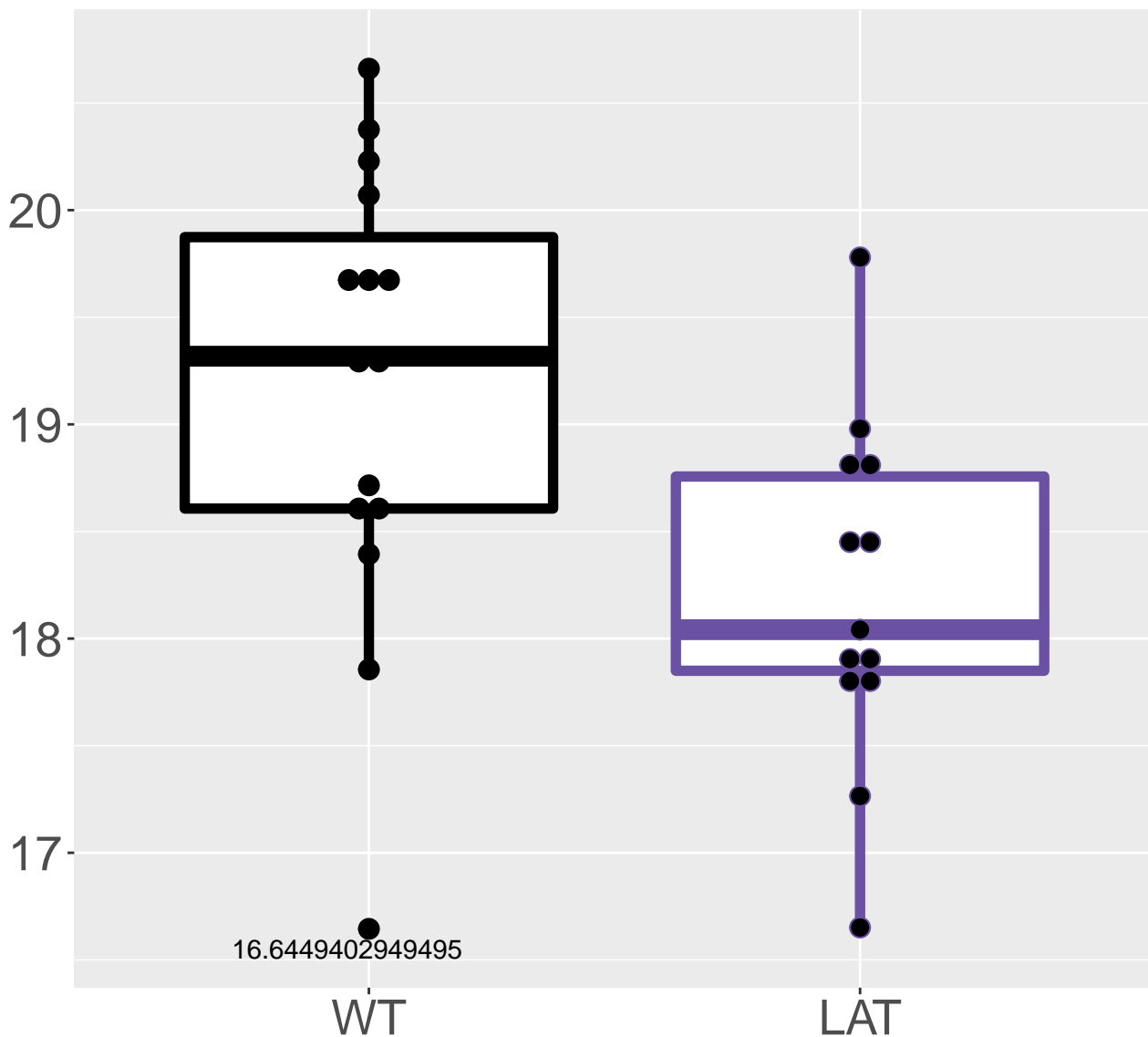


**FDR = 0.033, FC = -0.59**



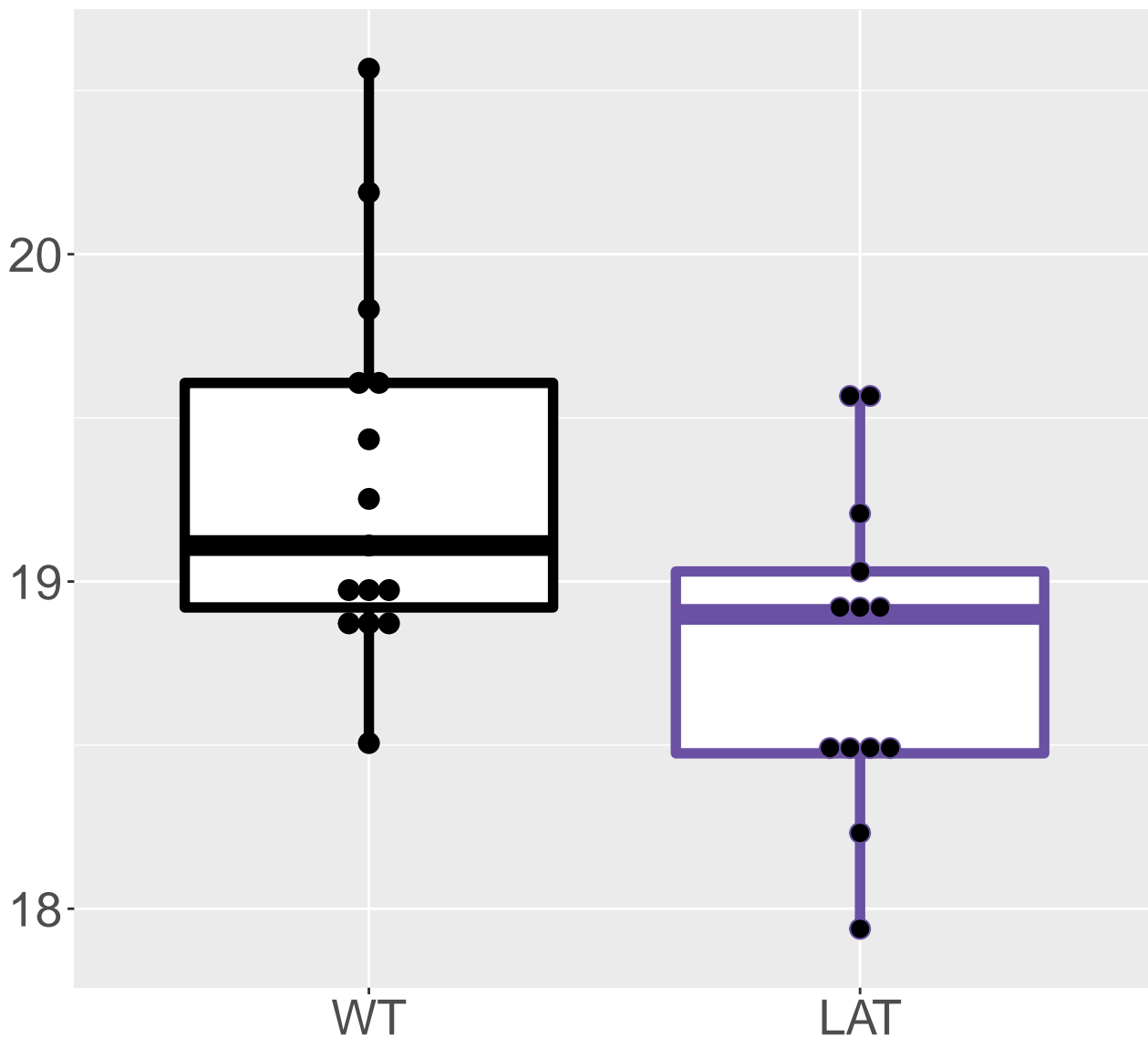
**M282.0657T482.88**

**FDR = 0.034, FC = -0.98**



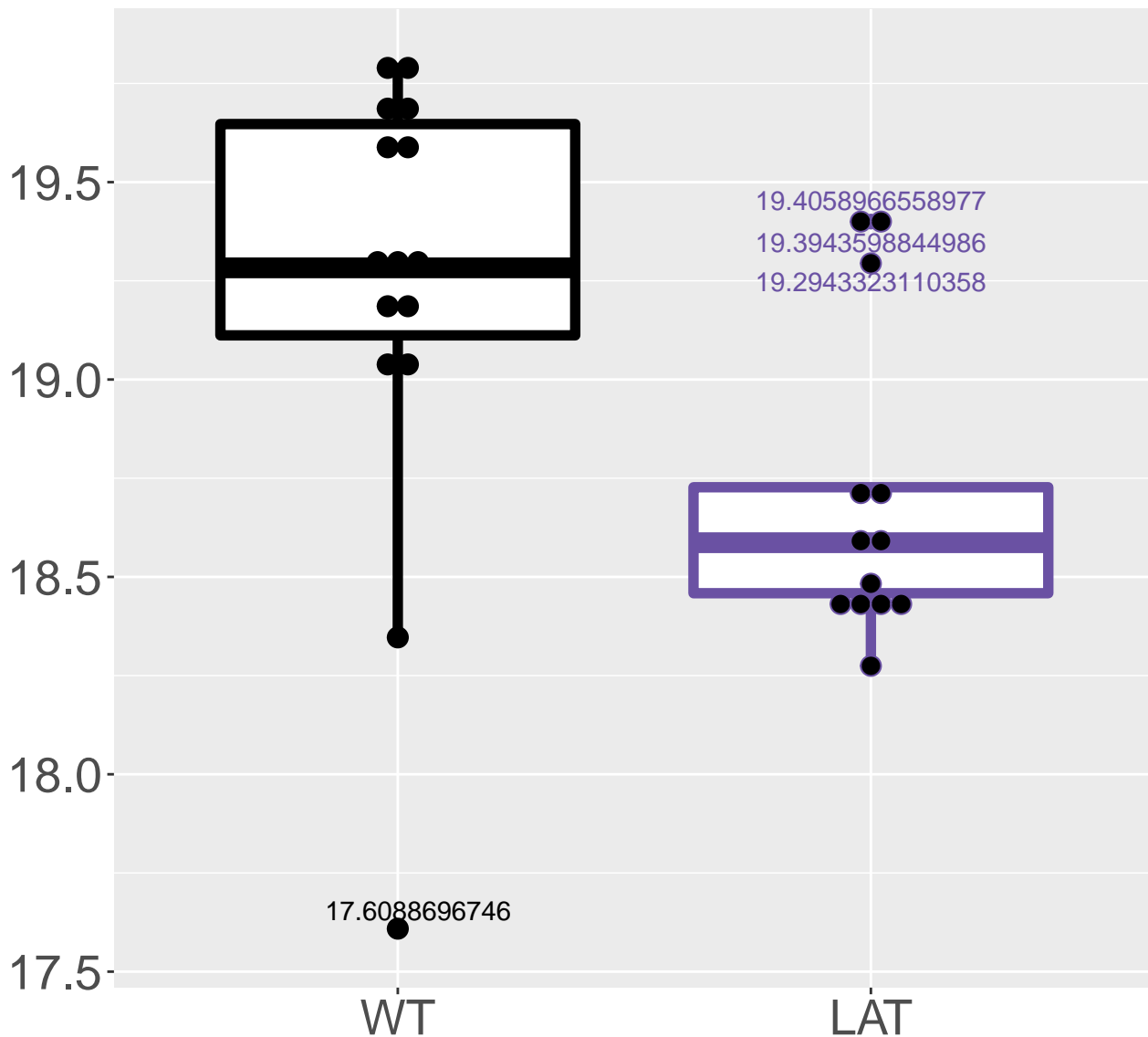
**M265.0833T496.1**

**FDR = 0.034, FC = -0.52**

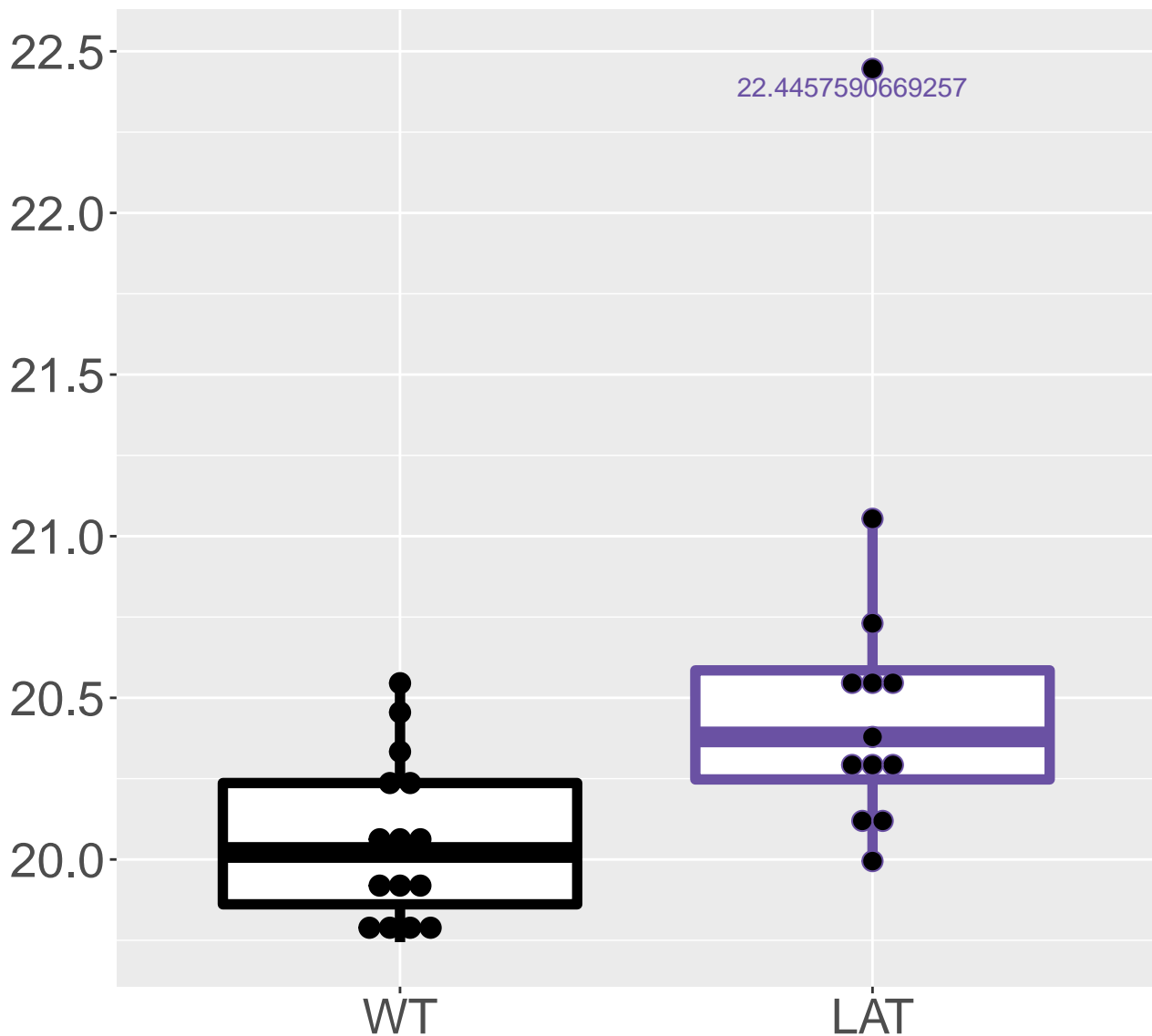


**M212.0369T573.31**

**FDR = 0.034, FC = -0.52**



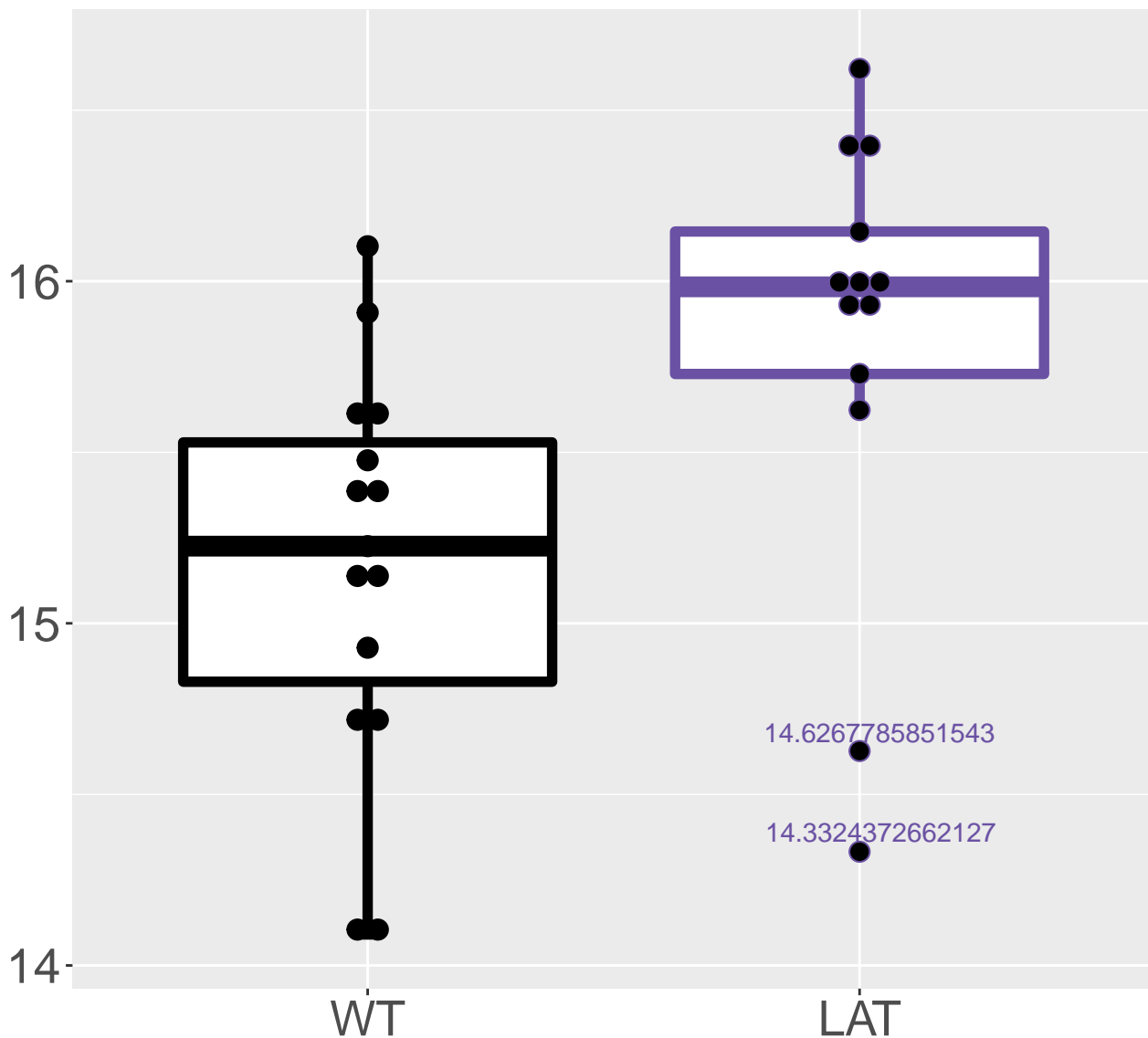
**N-Acetyl-L-aspartic acid;N-Acetylaspartic acid**  
**FDR = 0.034, FC = 0.51**





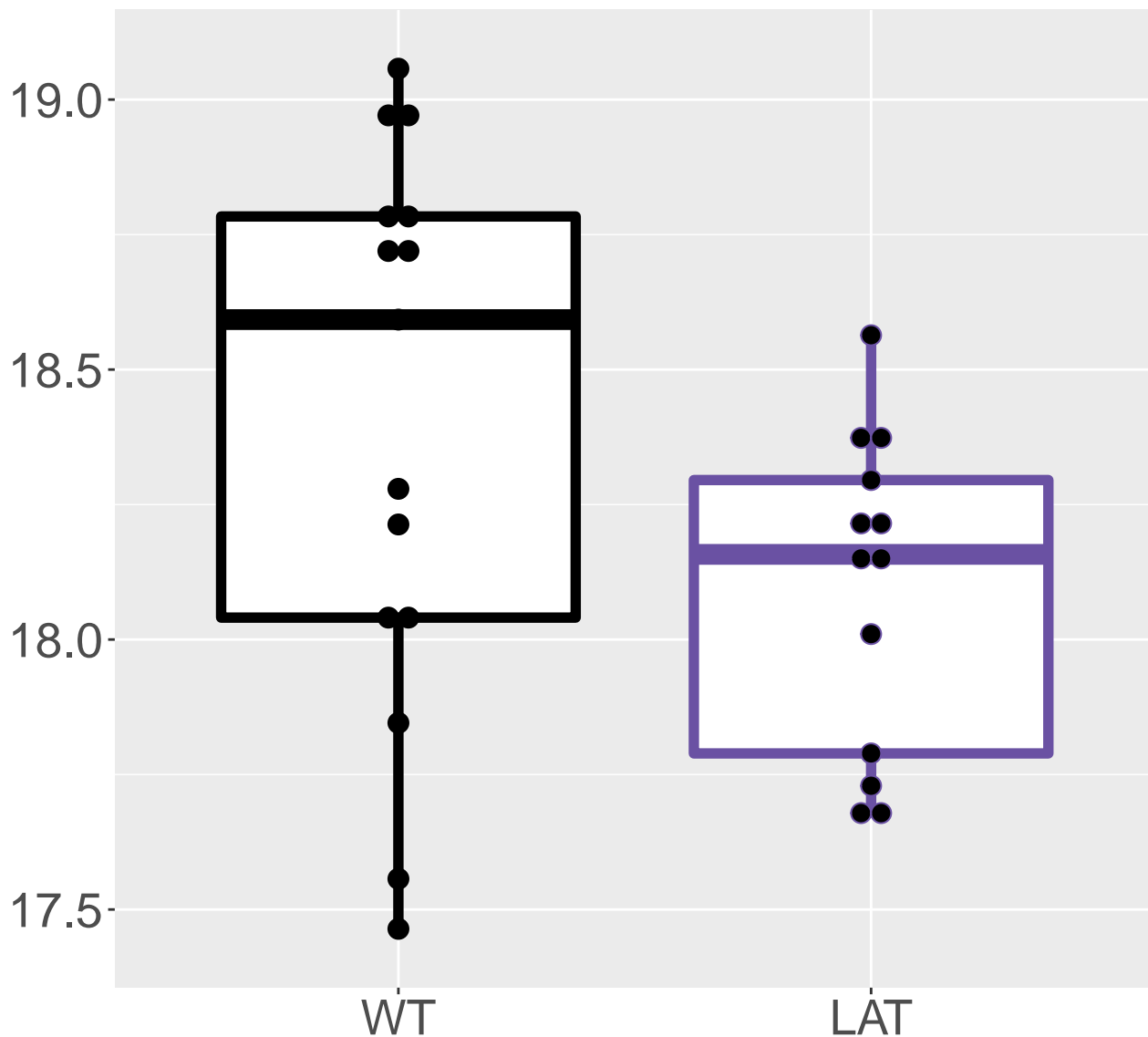
**M431.169T173.39**

**FDR = 0.034, FC = 0.65**



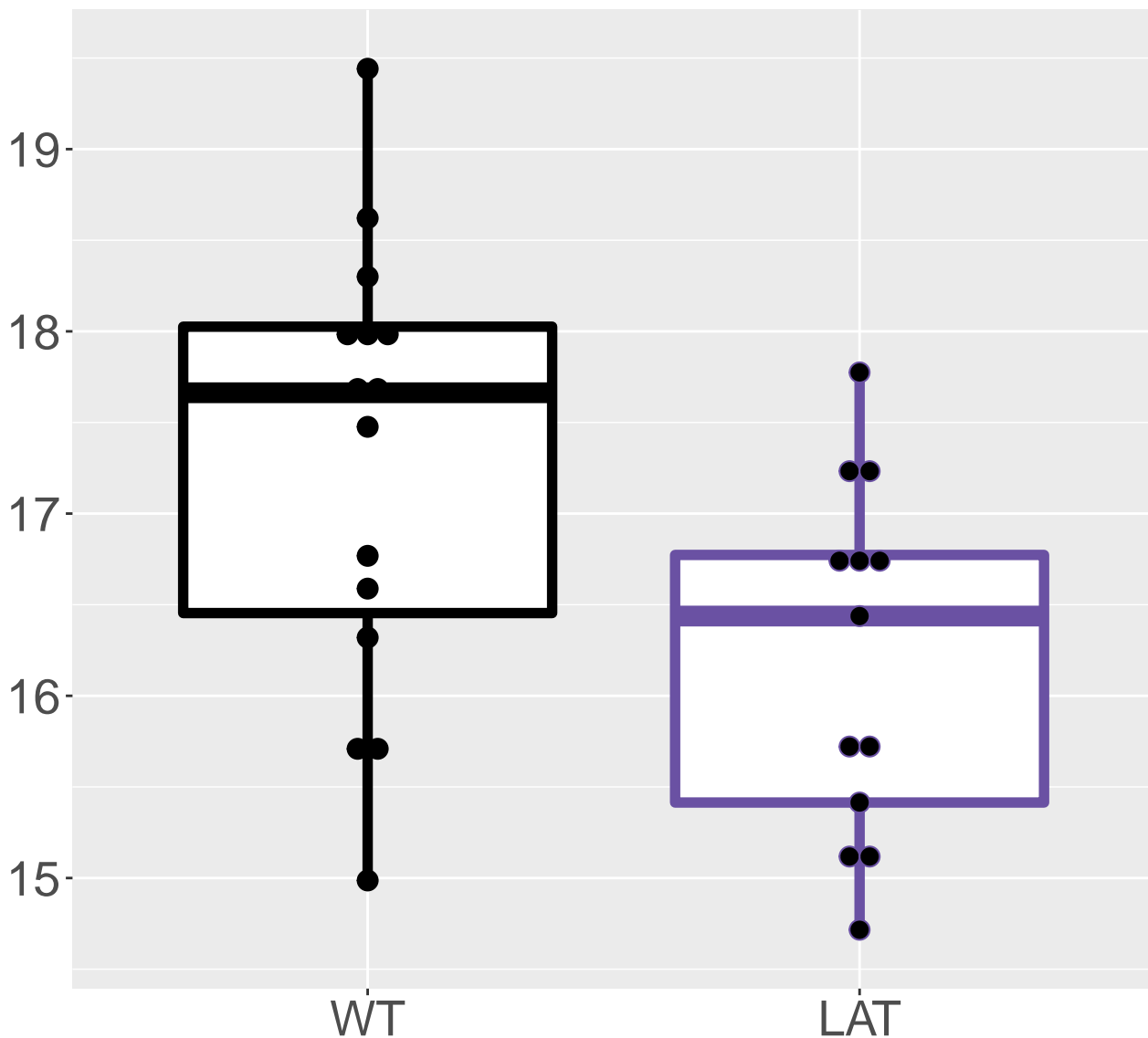
**M498.9308T74.21**

**FDR = 0.034, FC = -0.31, sex\*\***

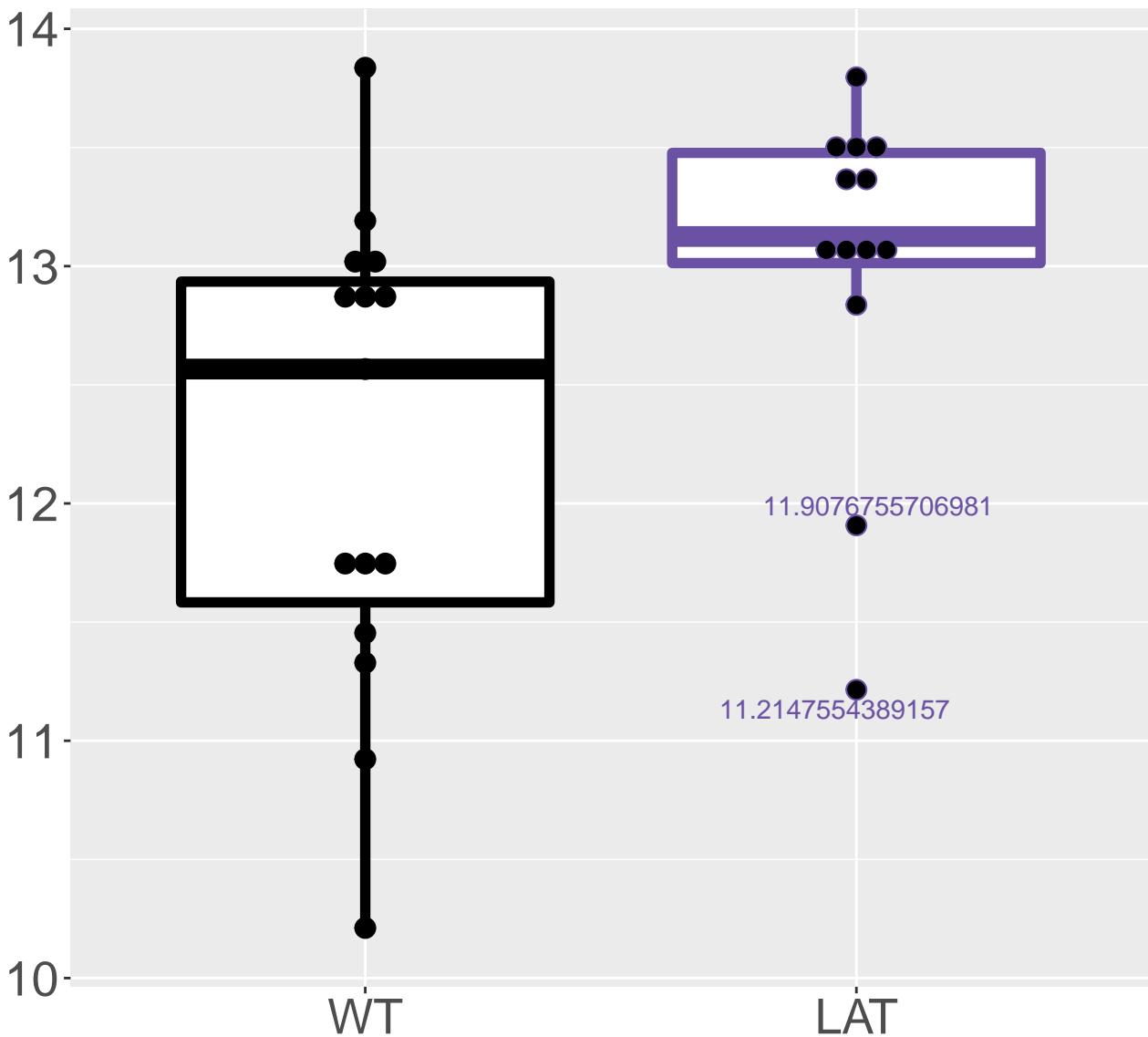


**M341.1207T450.94**

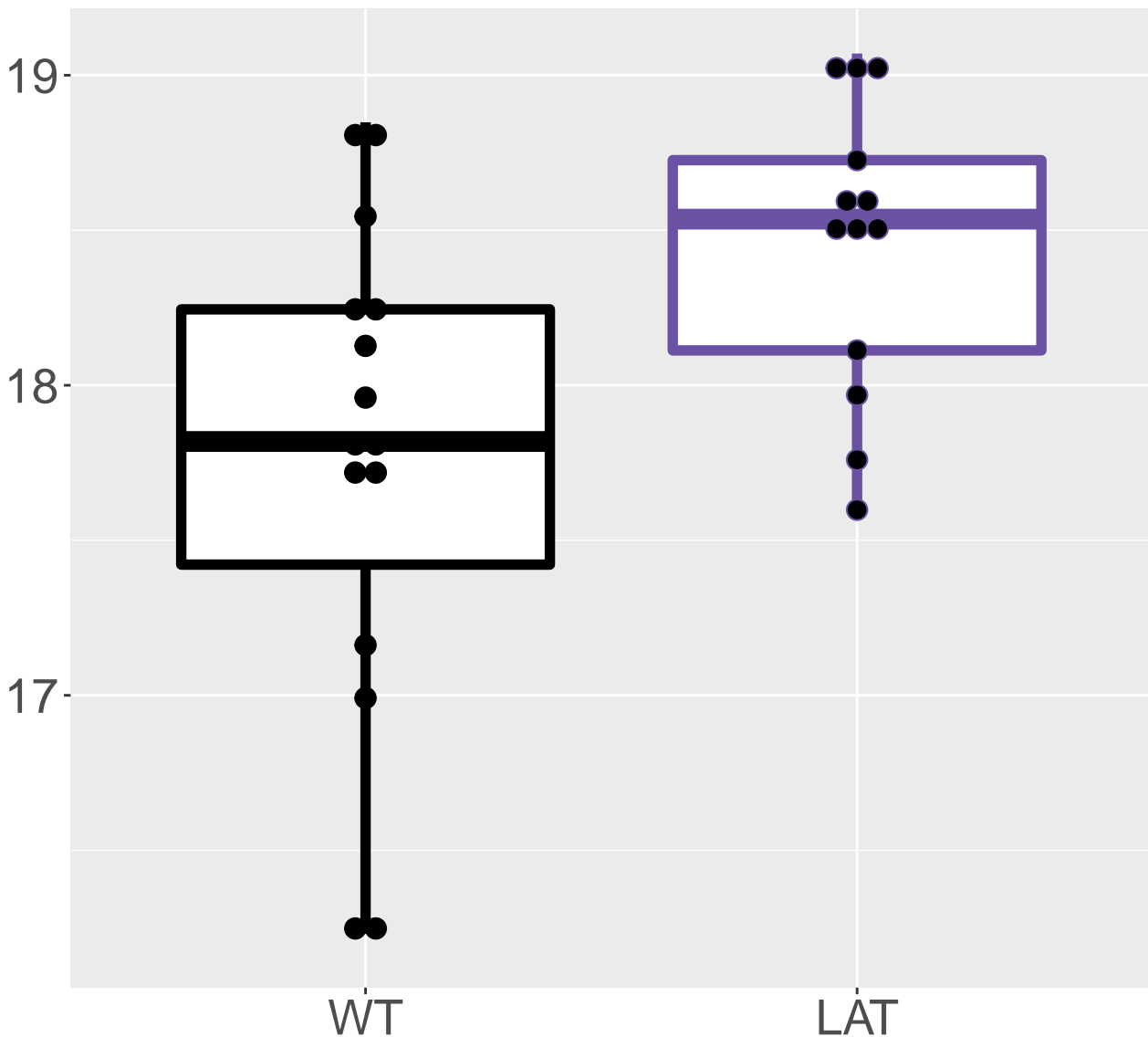
**FDR = 0.035, FC = -1.1**



**M363.0749T644.95**  
**FDR = 0.035, FC = 0.8**

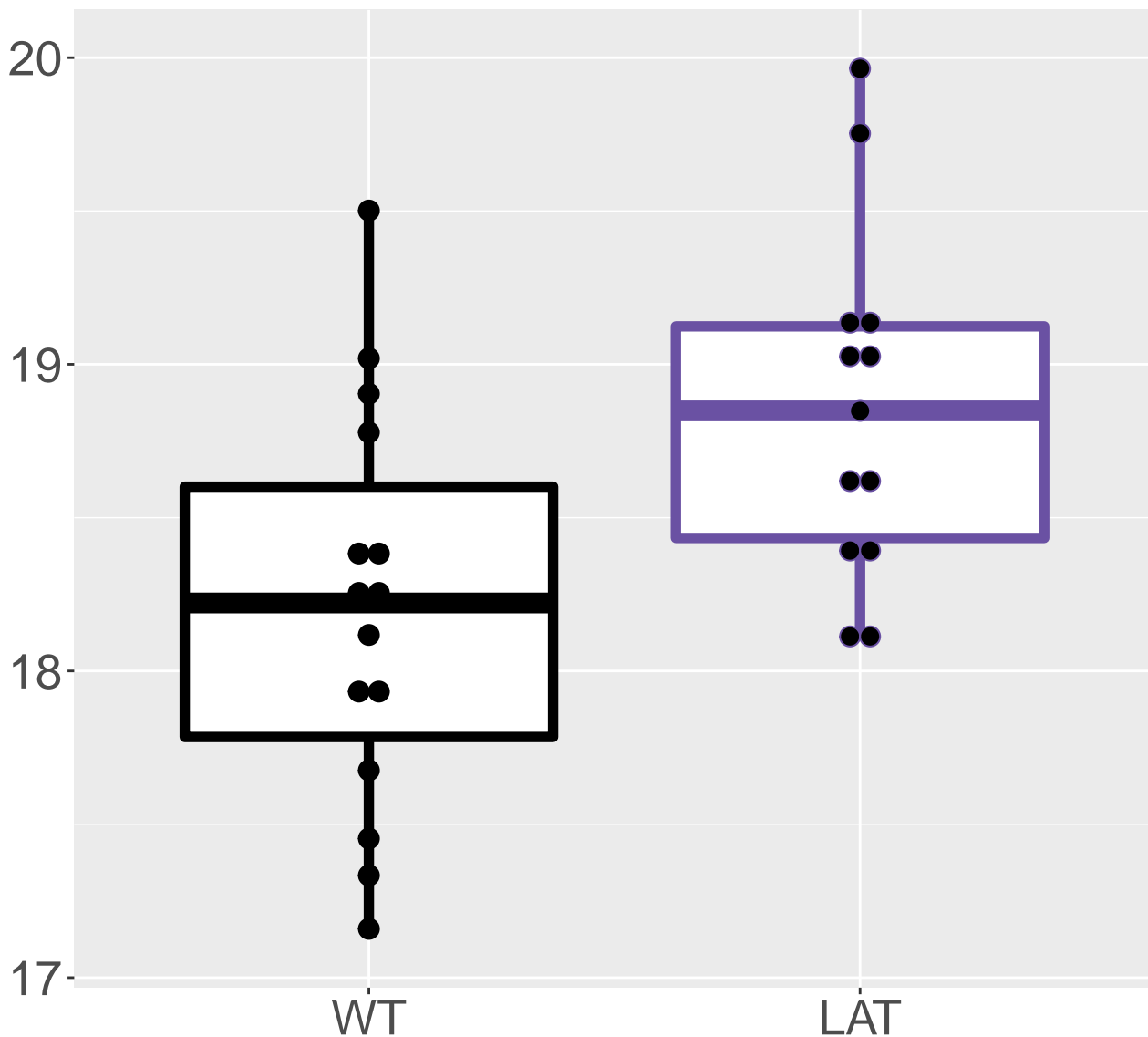


**M487.1008T545.96**  
**FDR = 0.035, FC = 0.69**



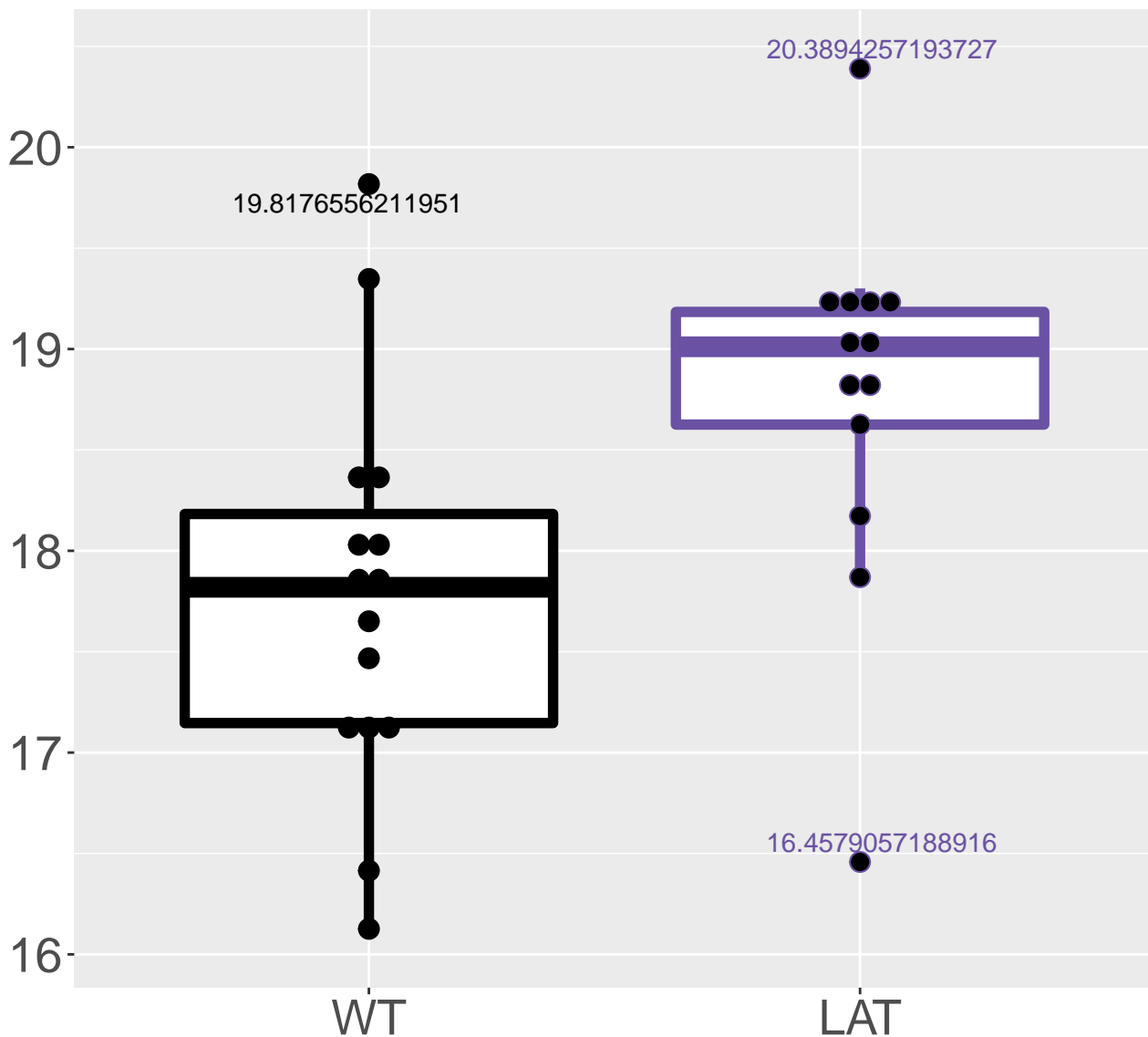
**M133.9919T149.75**

**FDR = 0.035, FC = 0.65**



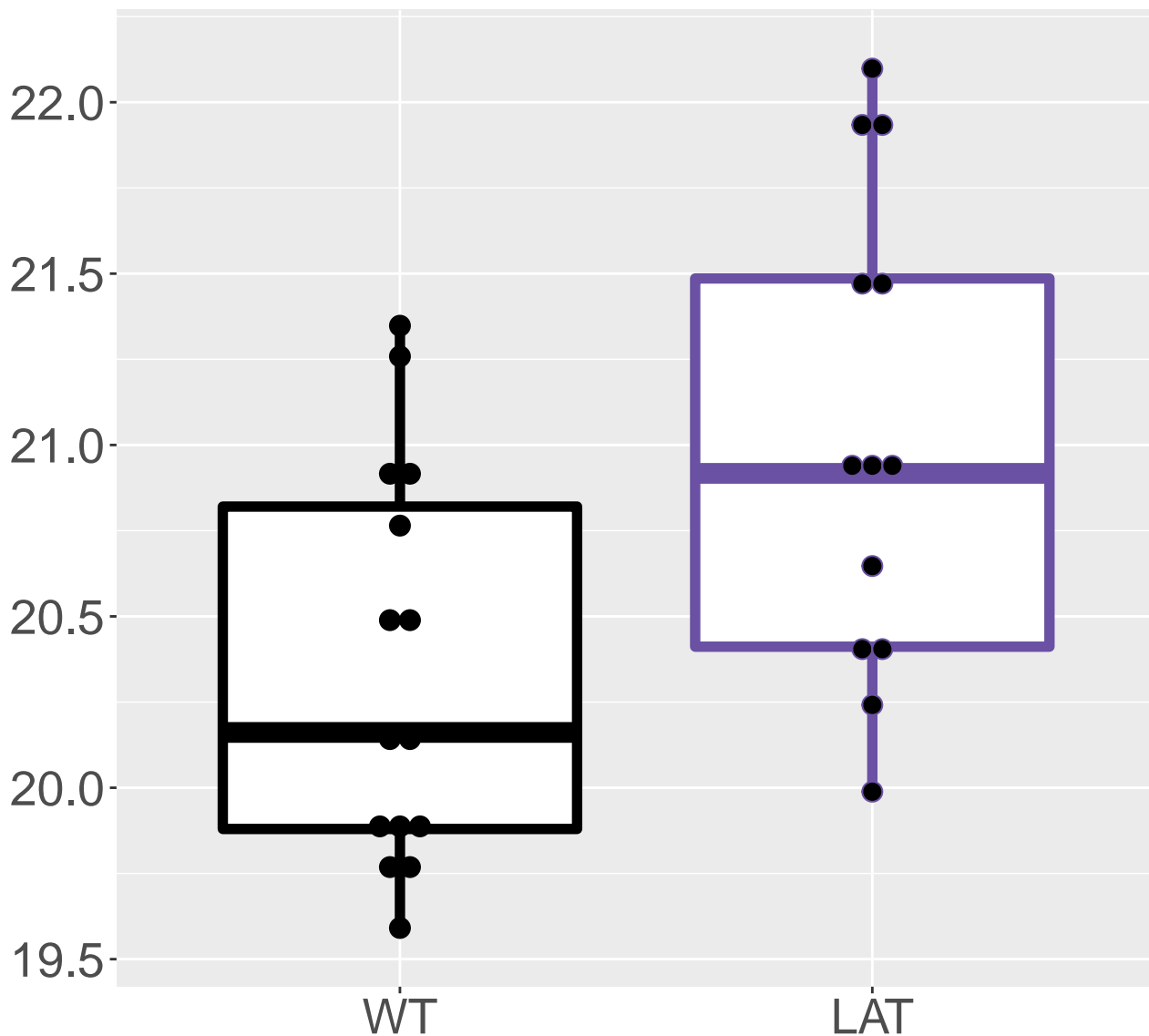
**M162.903T125.06**

**FDR = 0.035, FC = 1**



**M495.102T540.94**

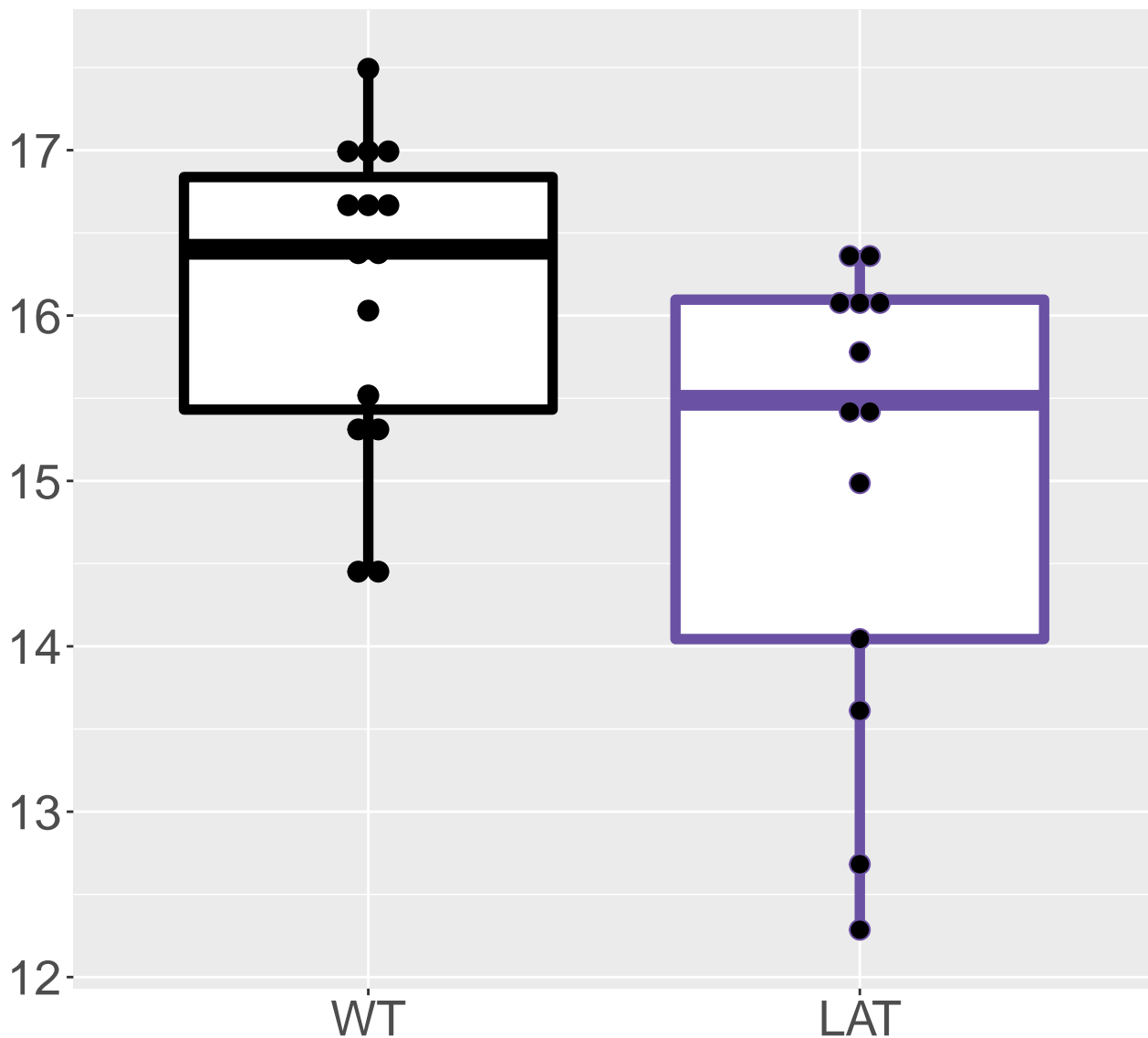
**FDR = 0.035, FC = 0.68**



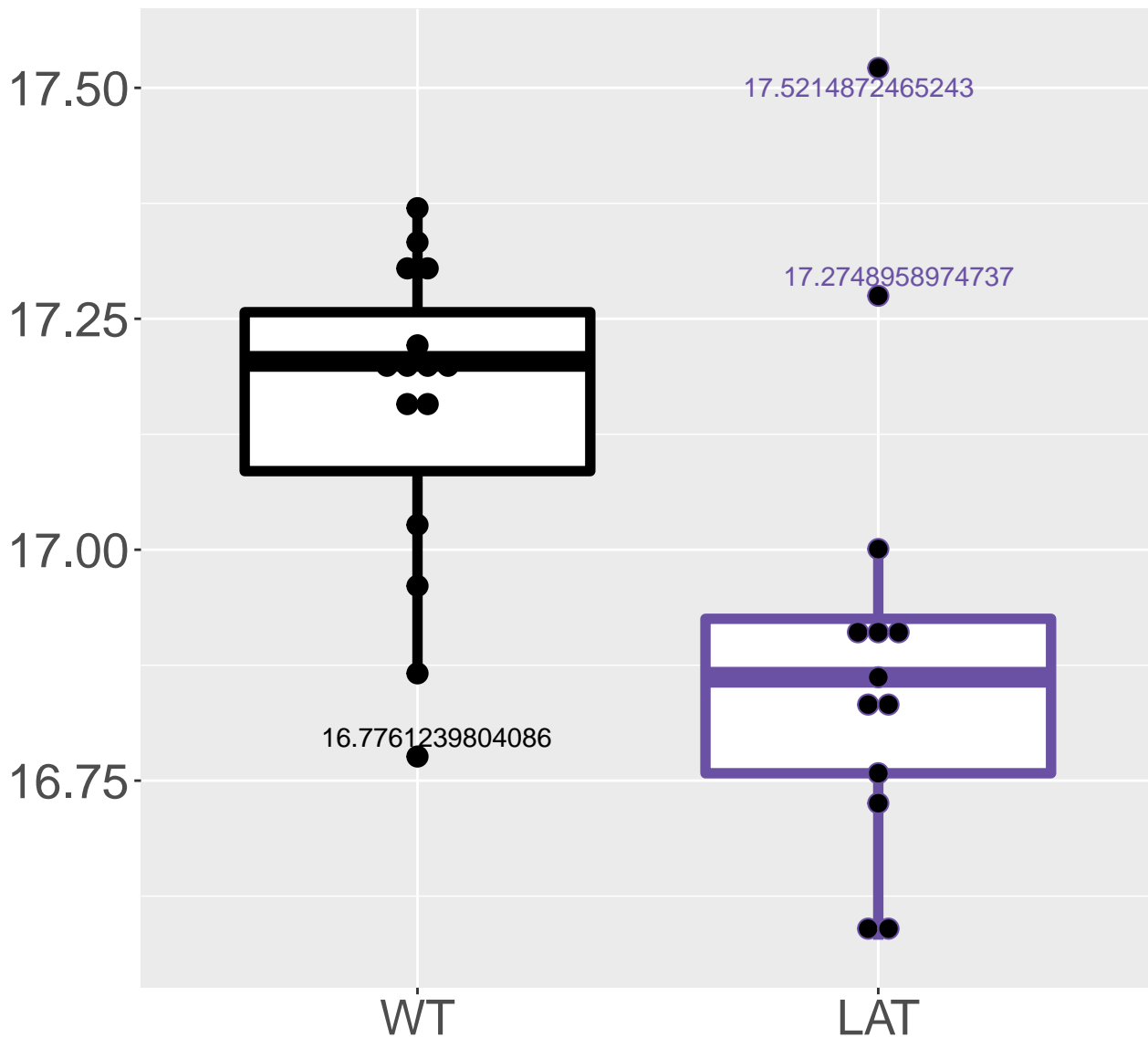


**M279.0837T523.74**

**FDR = 0.036, FC = -1.1, sex\***

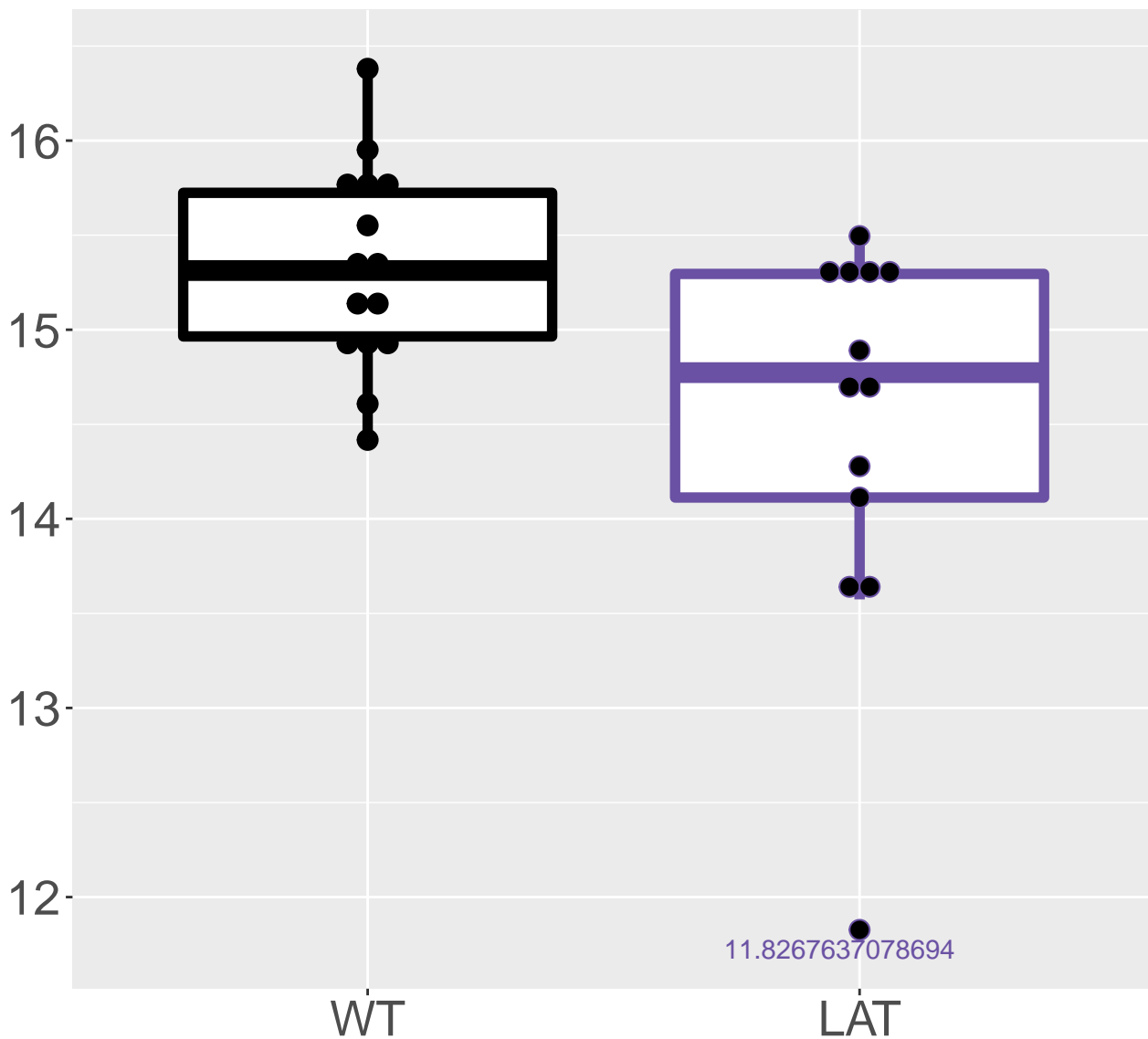


**M197.5787T78.27**  
**FDR = 0.036, FC = -0.25**



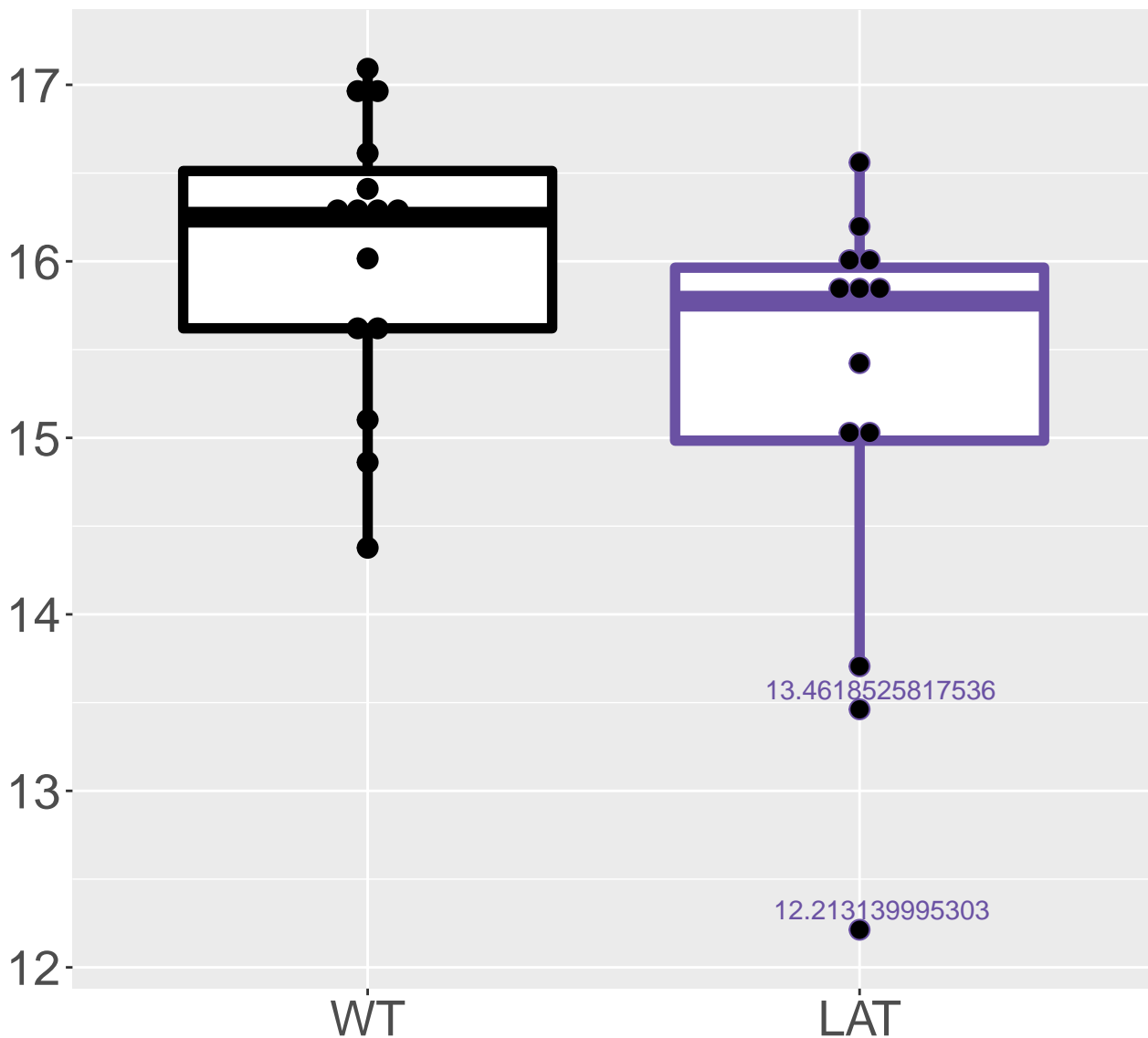
**M244.0596T400.62**

**FDR = 0.036, FC = -0.83**

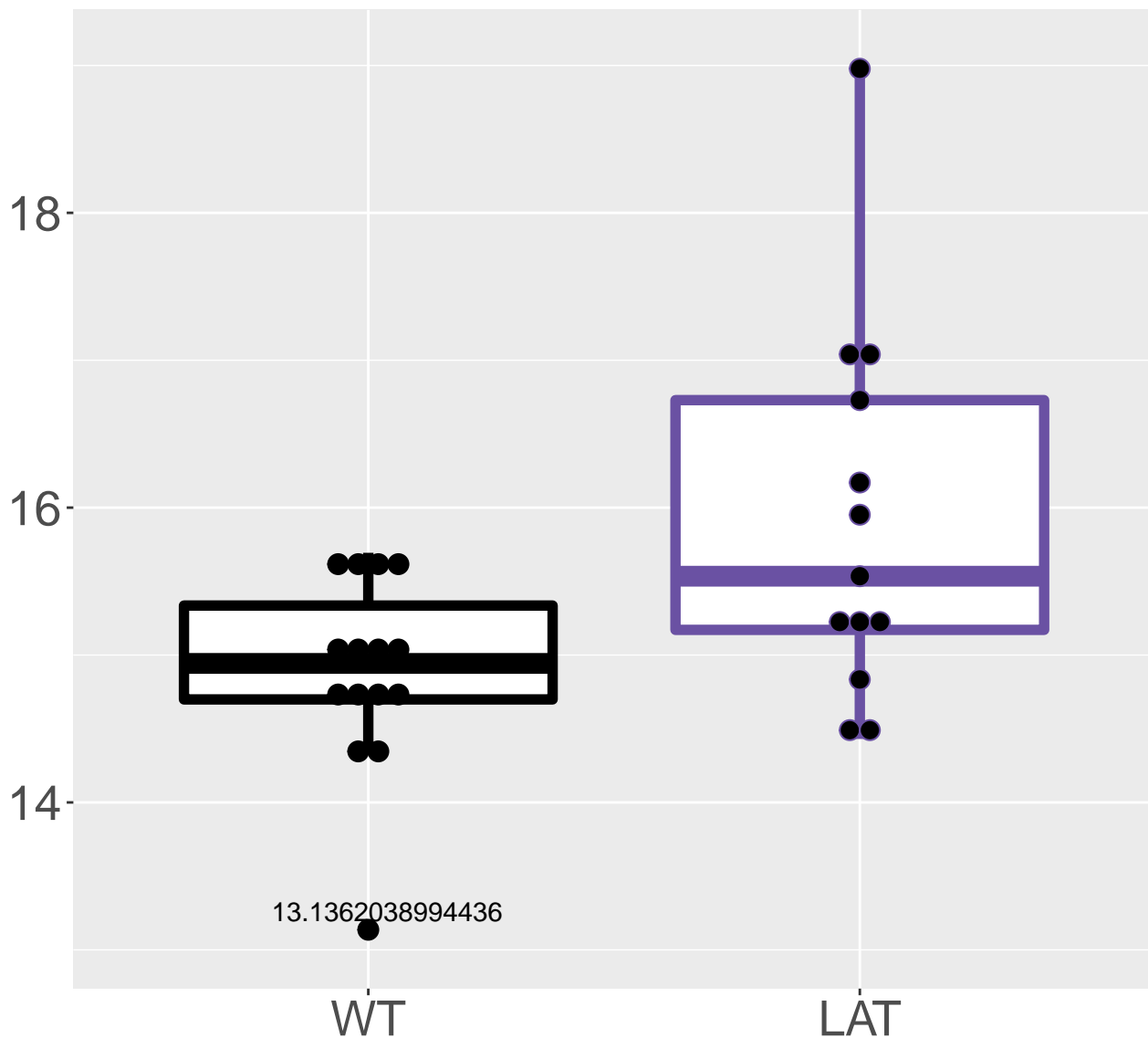


**M393.1885T179.98**

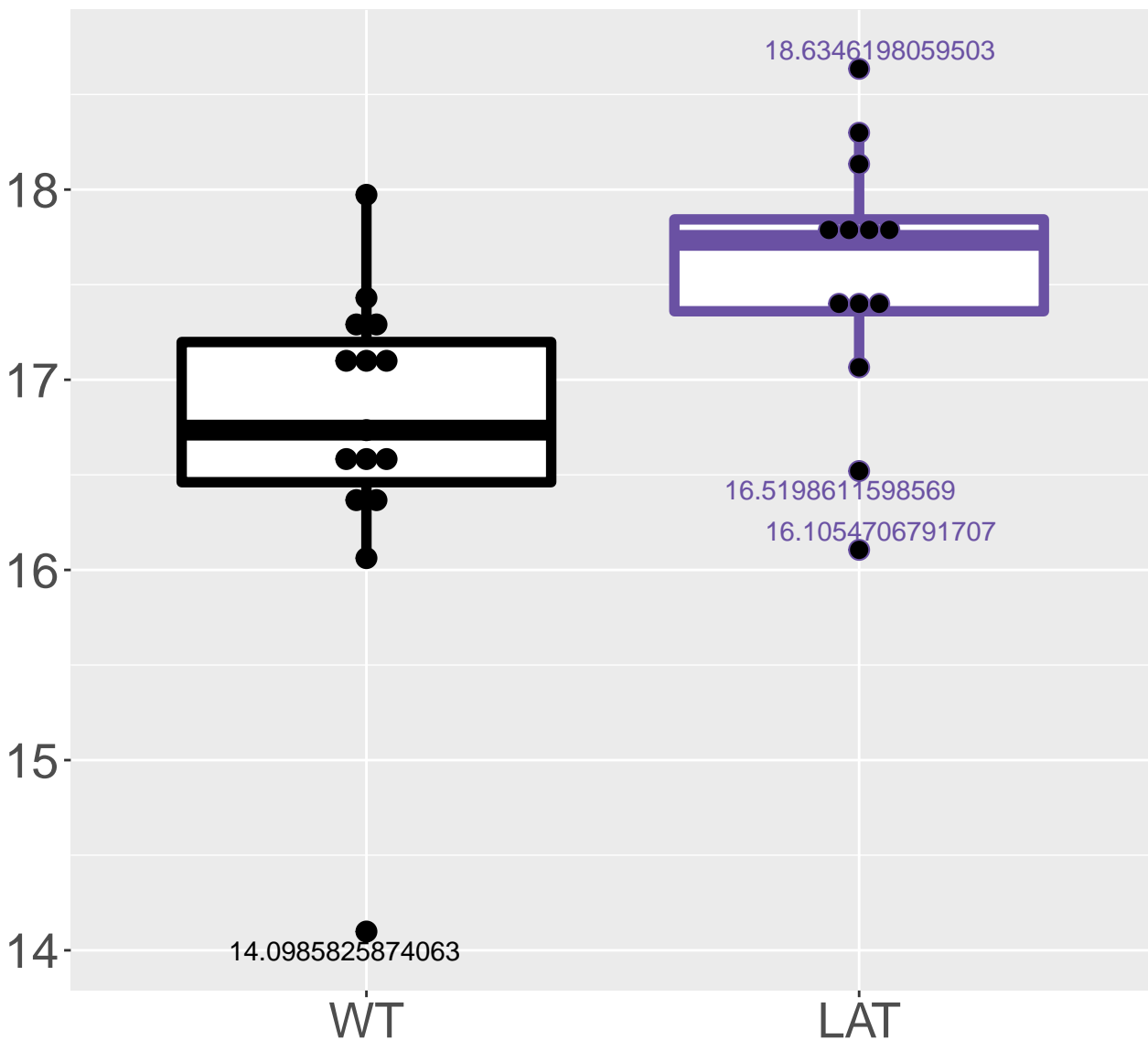
**FDR = 0.036, FC = -0.88**



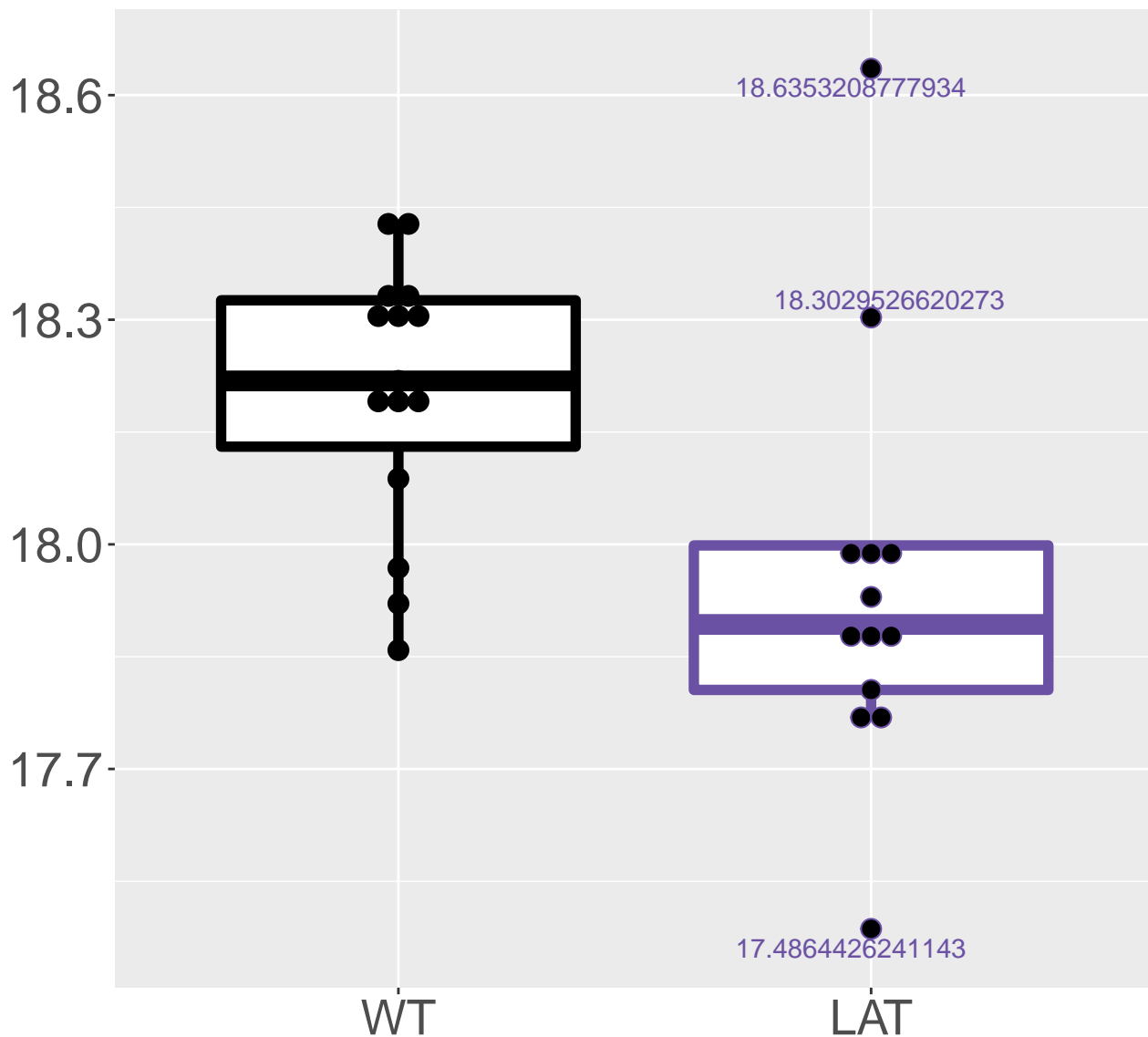
**M111.9296T698.76**  
**FDR = 0.037, FC = 1**



**FDR = 0.037, FC = 0.84**

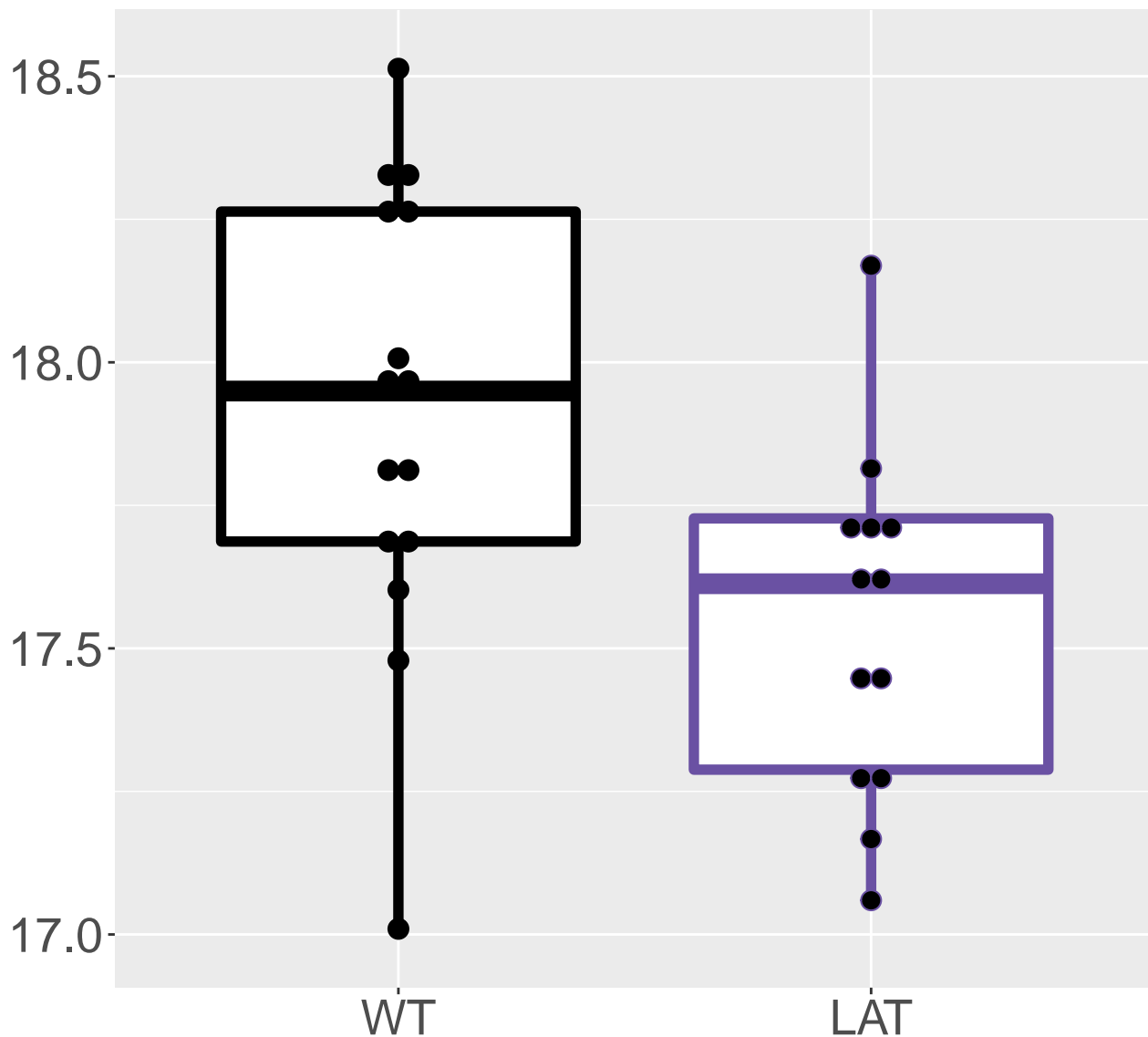


**M320.6391T78.26\_1**  
**FDR = 0.037, FC = -0.26**



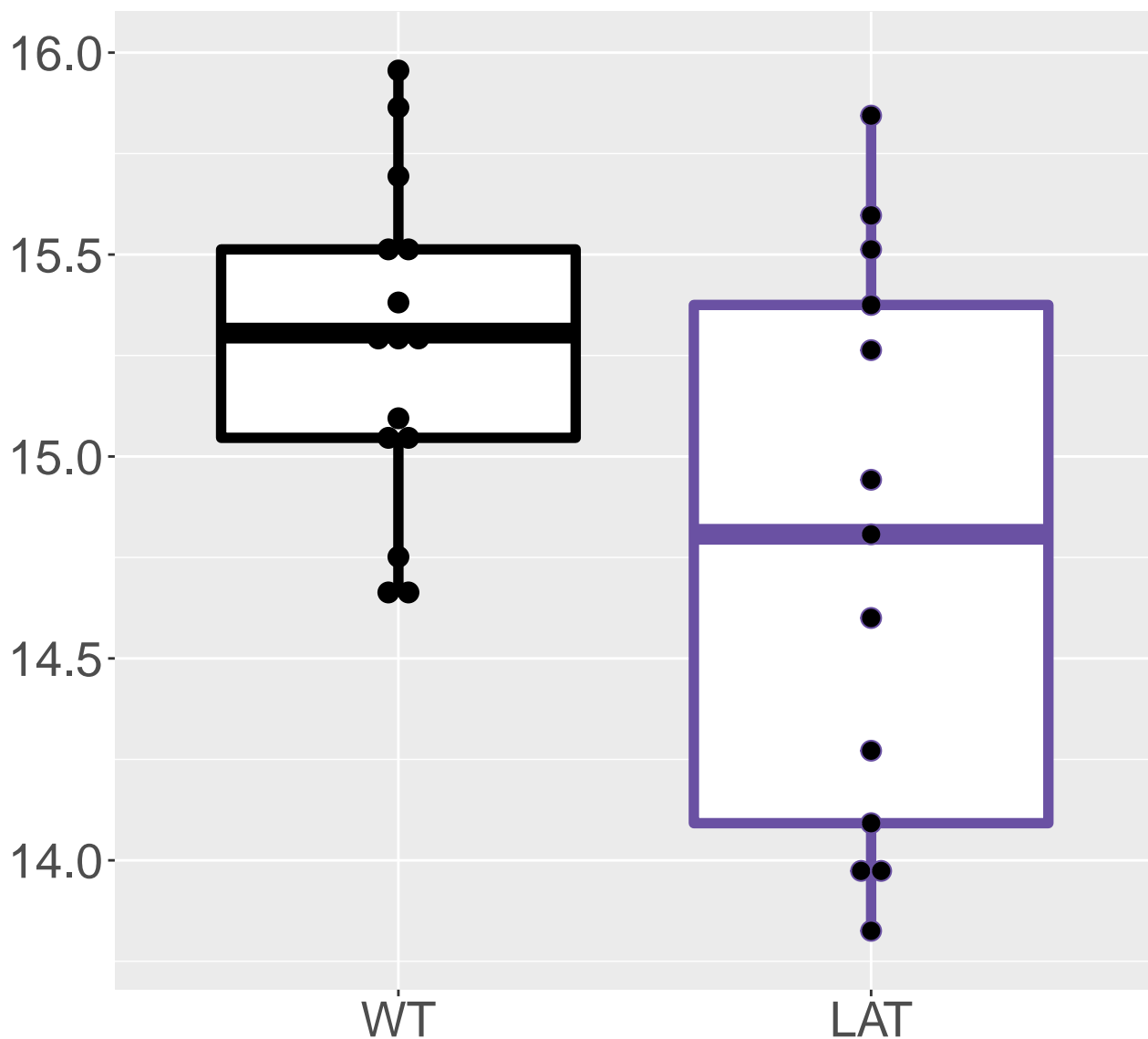
**M292.0362T407.11**

**FDR = 0.037, FC = -0.37**



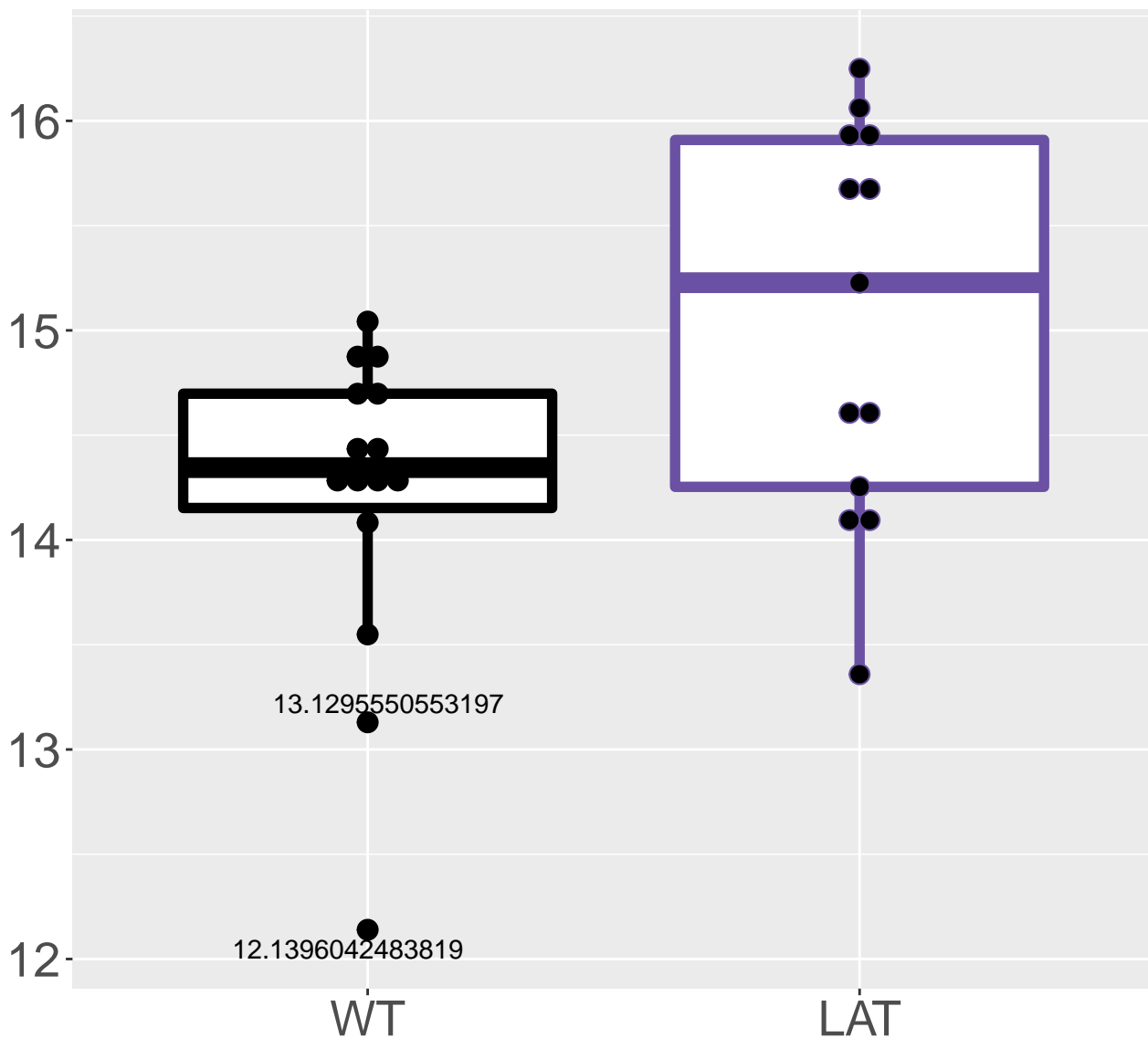


**M261.0482T423.52**  
**FDR = 0.037, FC = -0.5**

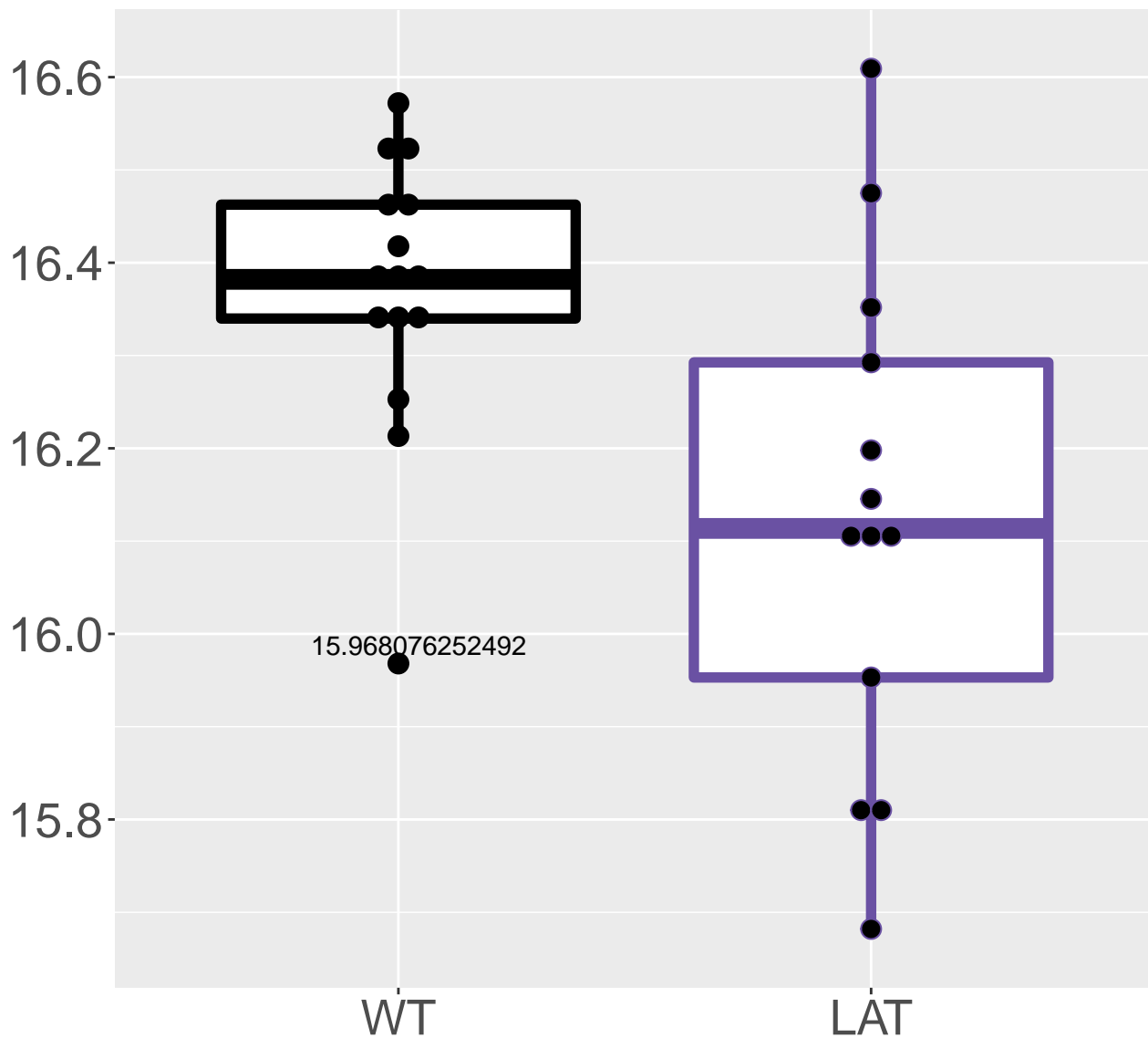


**M395.0883T609.33**

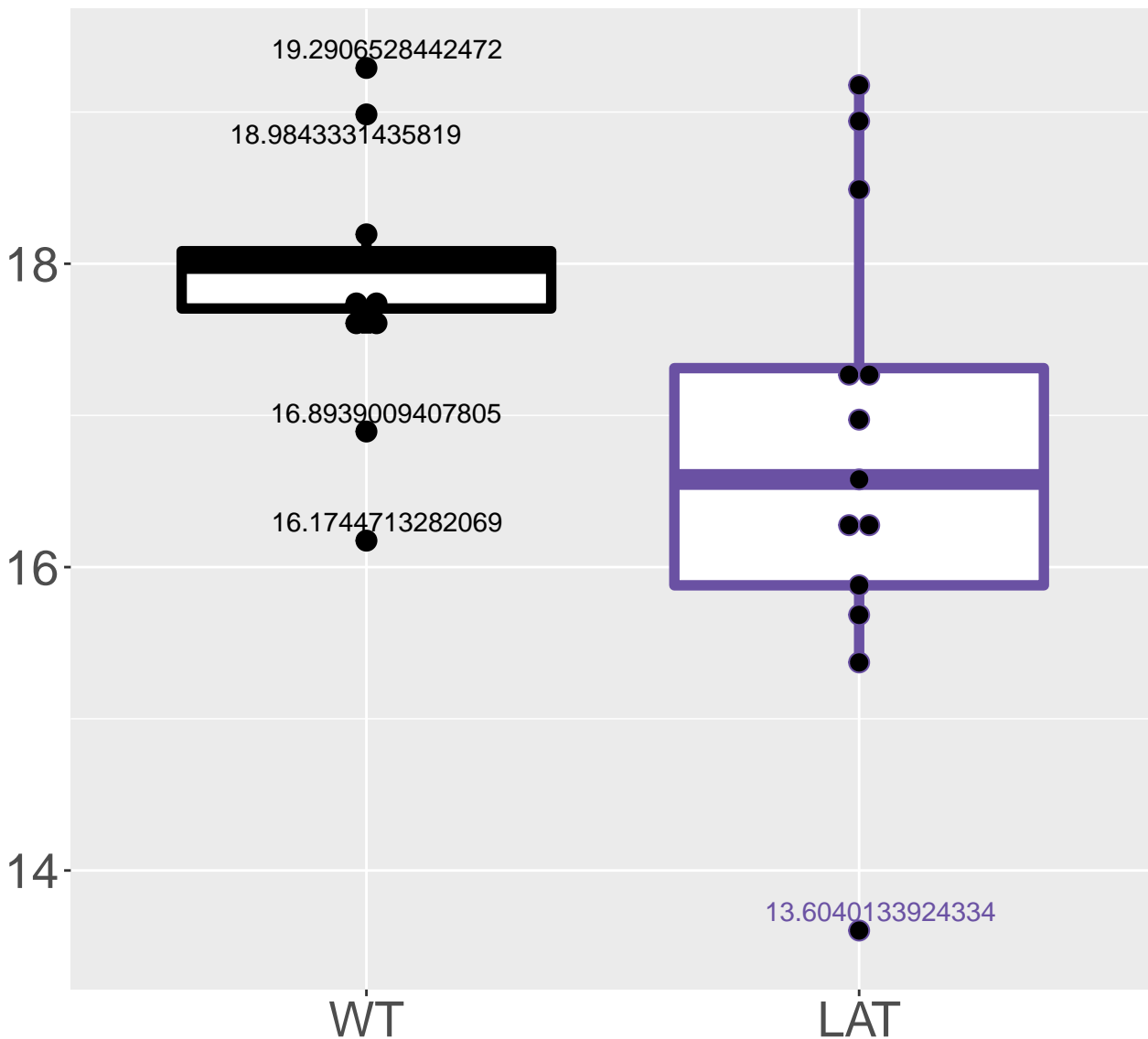
**FDR = 0.037, FC = 0.85**



**M293.928T551.07**  
**FDR = 0.037, FC = -0.25**

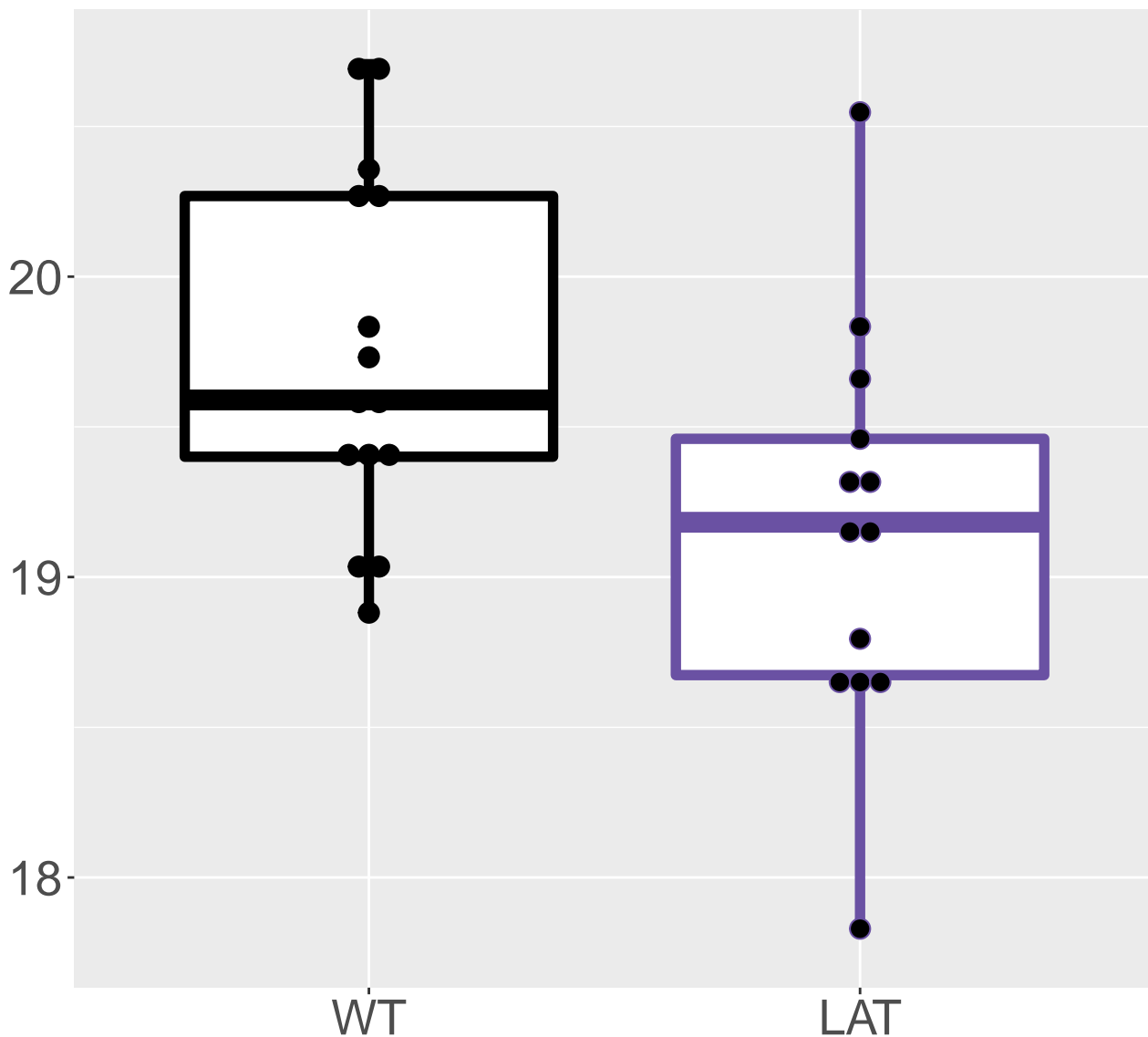


**M183.0874T231.91**  
**FDR = 0.037, FC = -1.1**

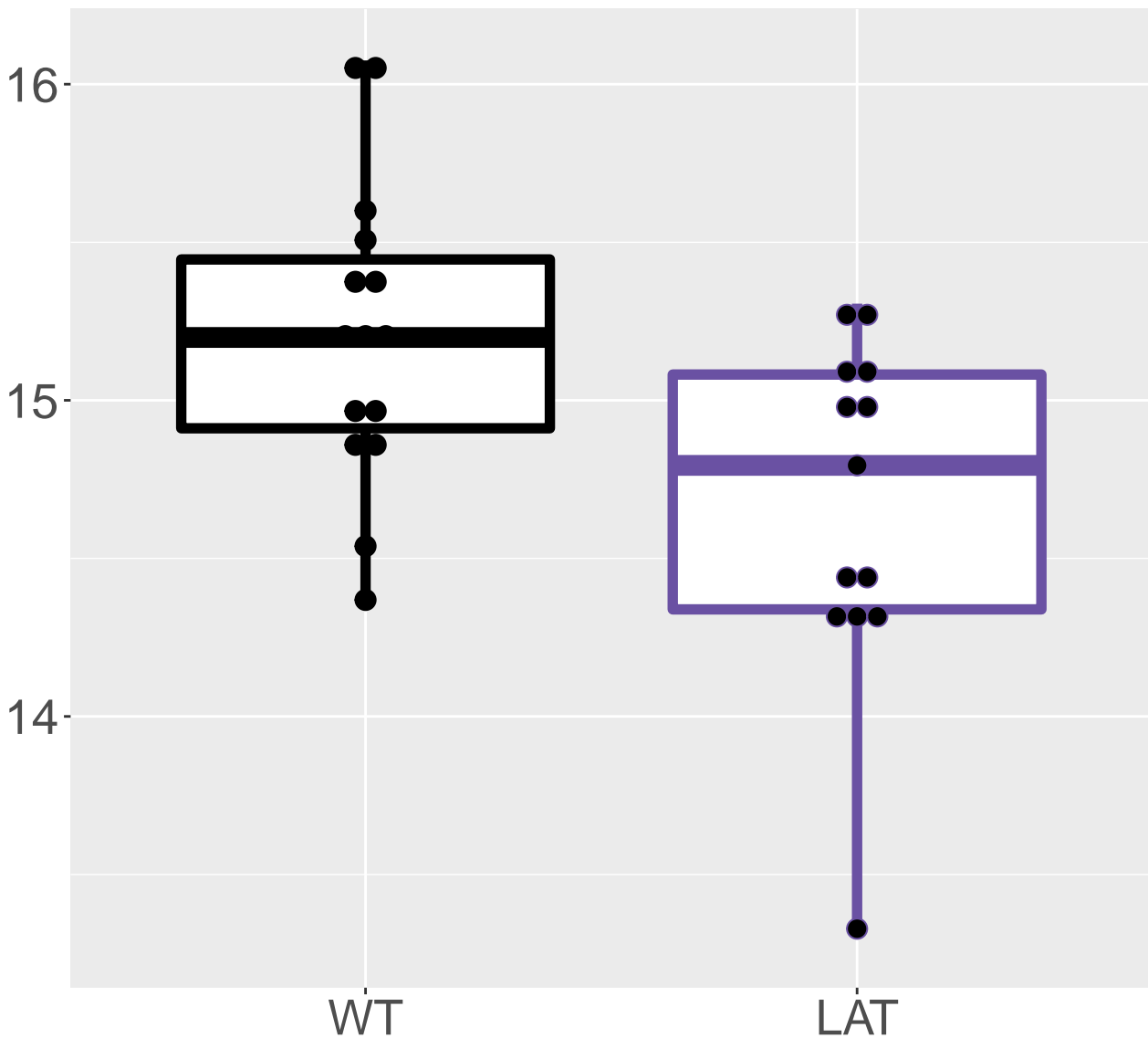


**M538.4927T78.16**

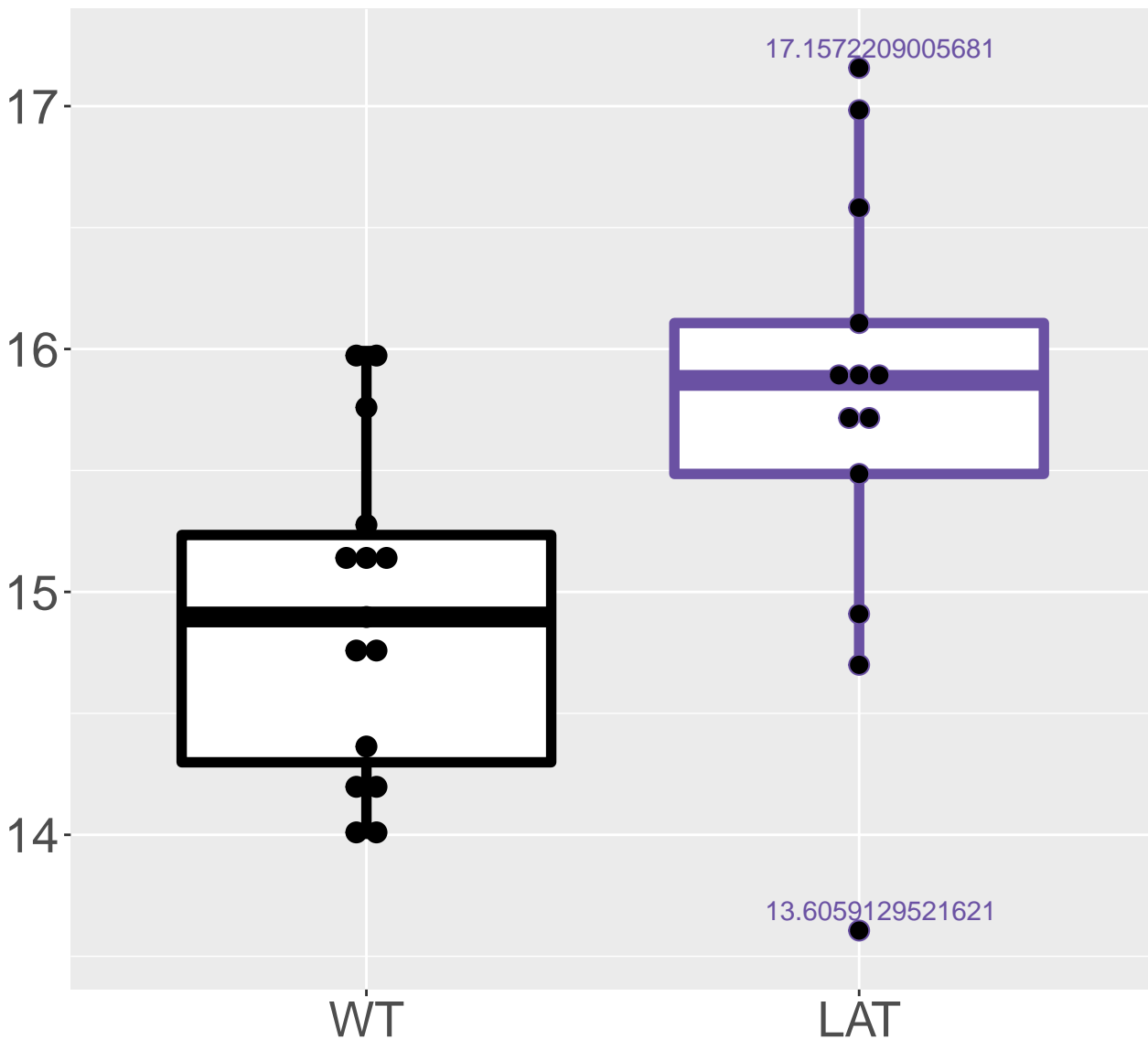
**FDR = 0.038, FC = -0.59**



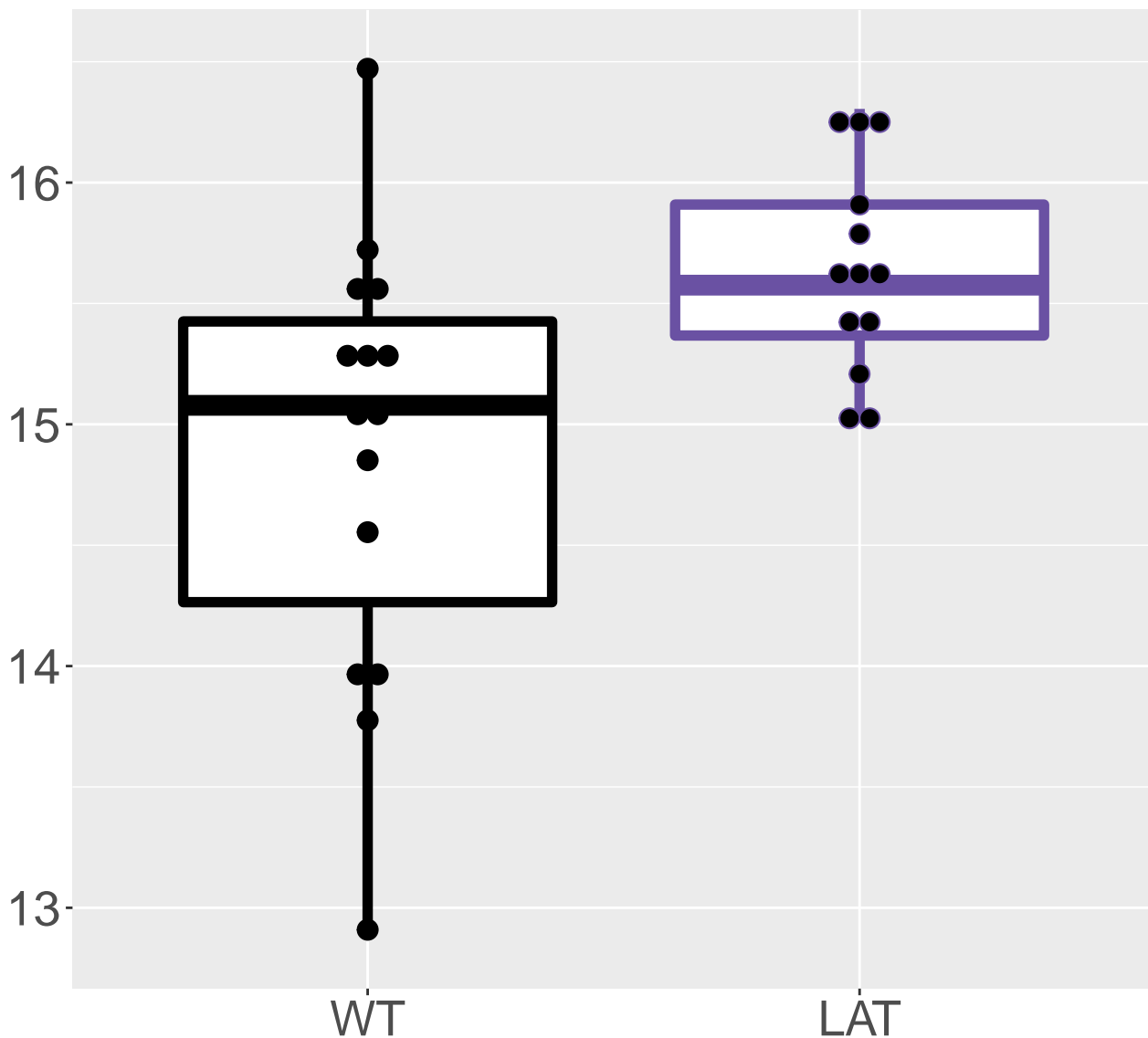
**M191.9797T131.91**  
**FDR = 0.038, FC = -0.54**



**M548.0868T671.42**  
**FDR = 0.038, FC = 0.83**



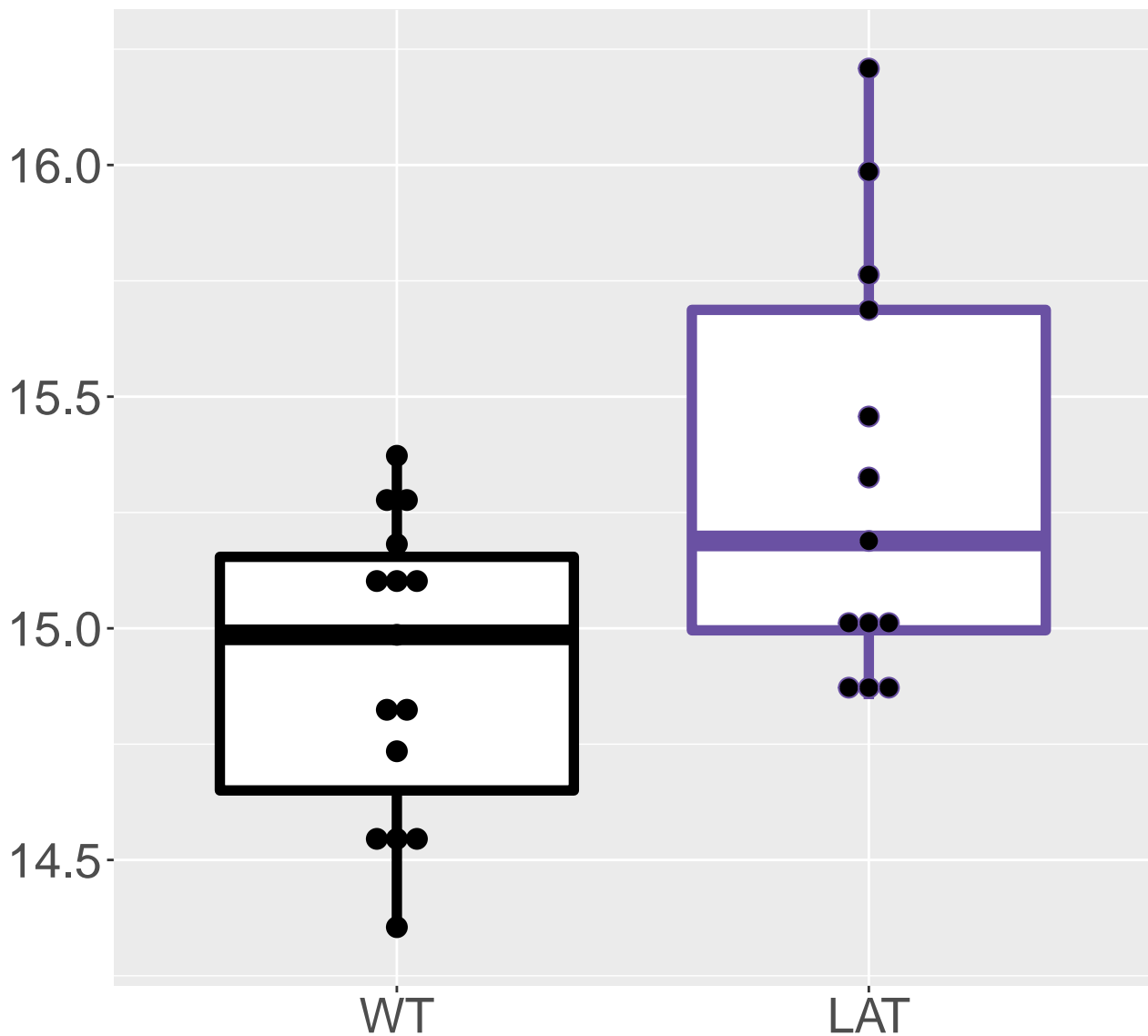
**Indole-3-acetic acid;Indoleacetic acid**  
**FDR = 0.038, FC = 0.76**





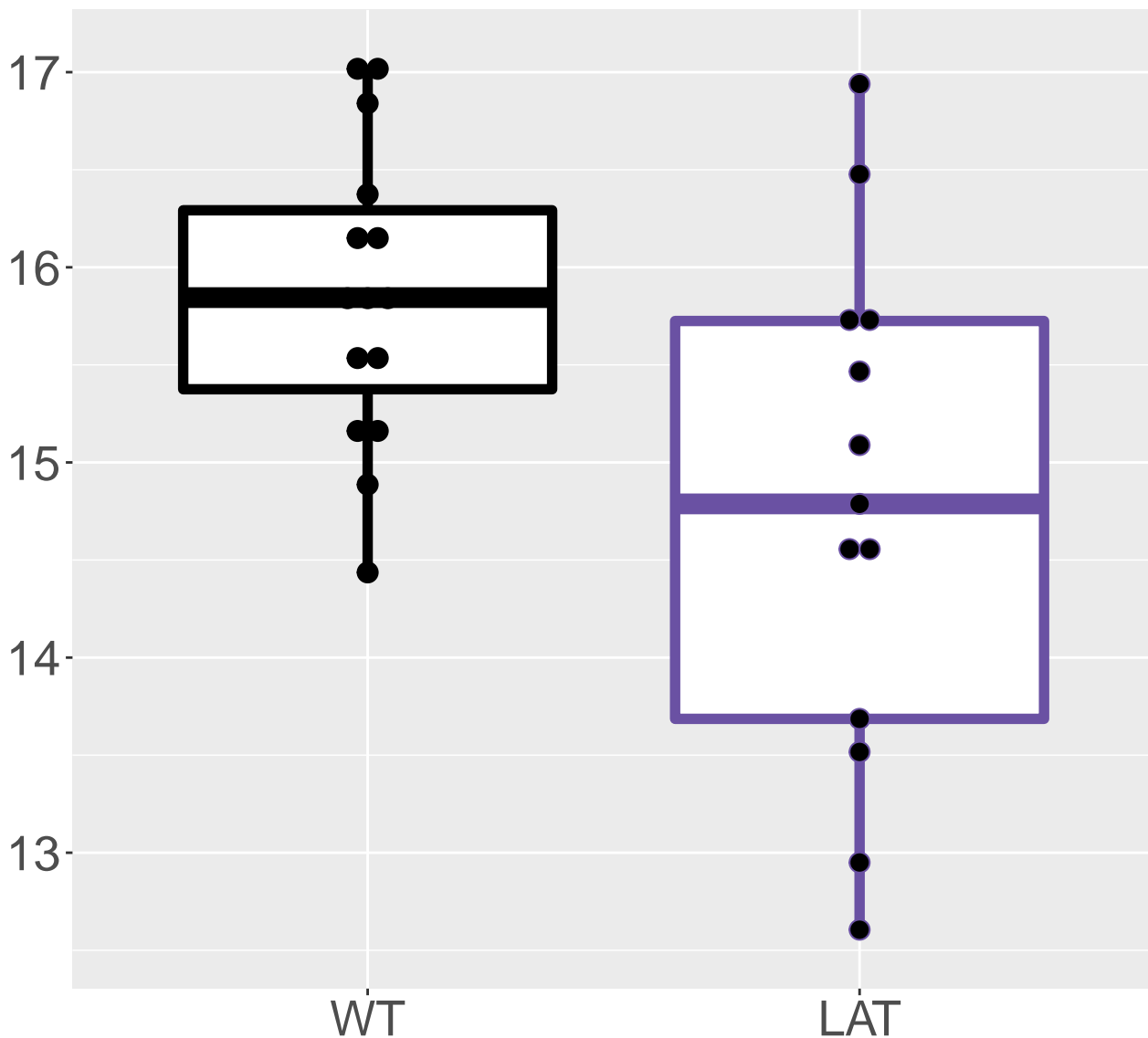
**M164.0355T99.16**

**FDR = 0.038, FC = 0.41**



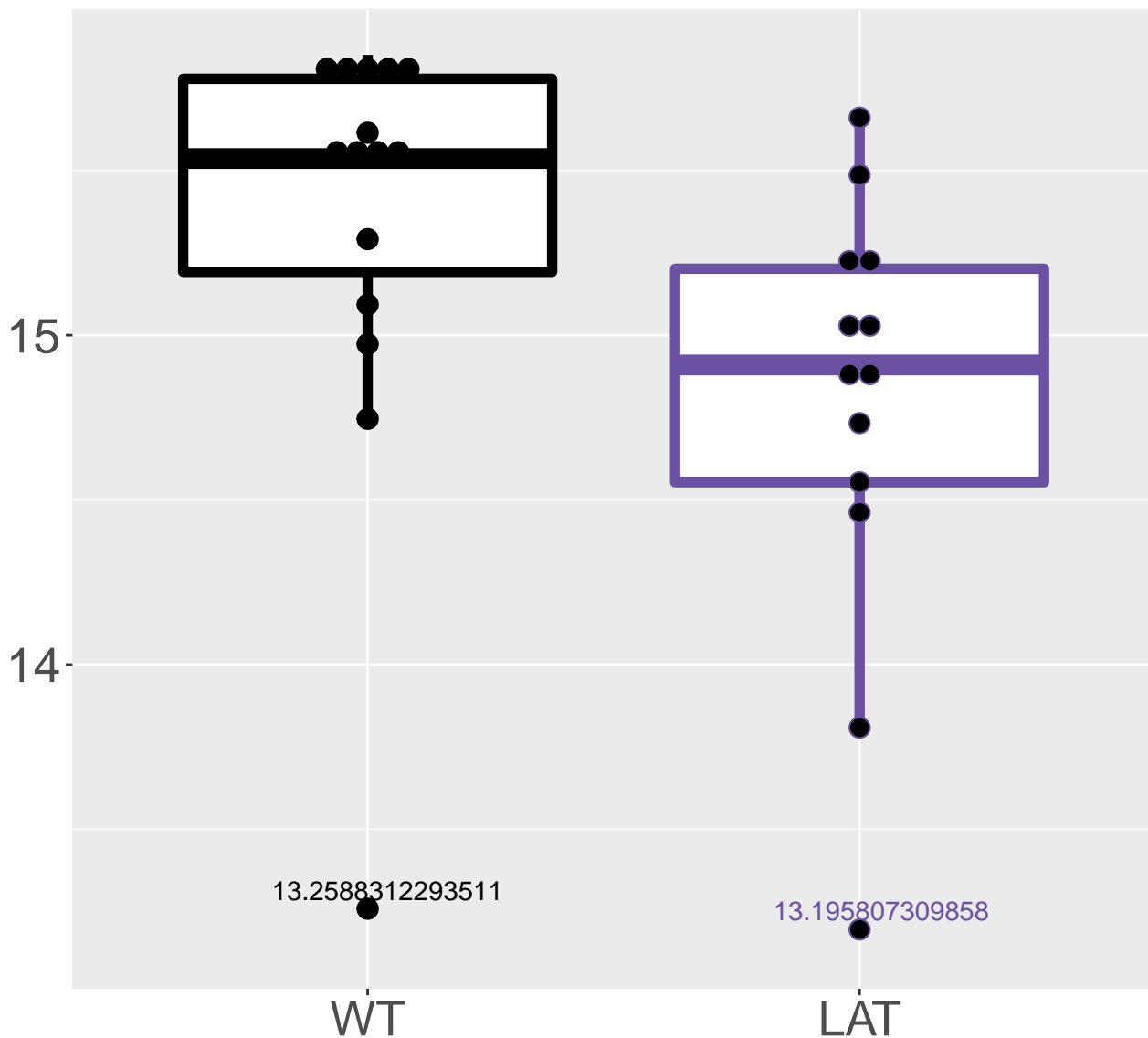
**M493.2231T206.13**

**FDR = 0.038, FC = -1.1**



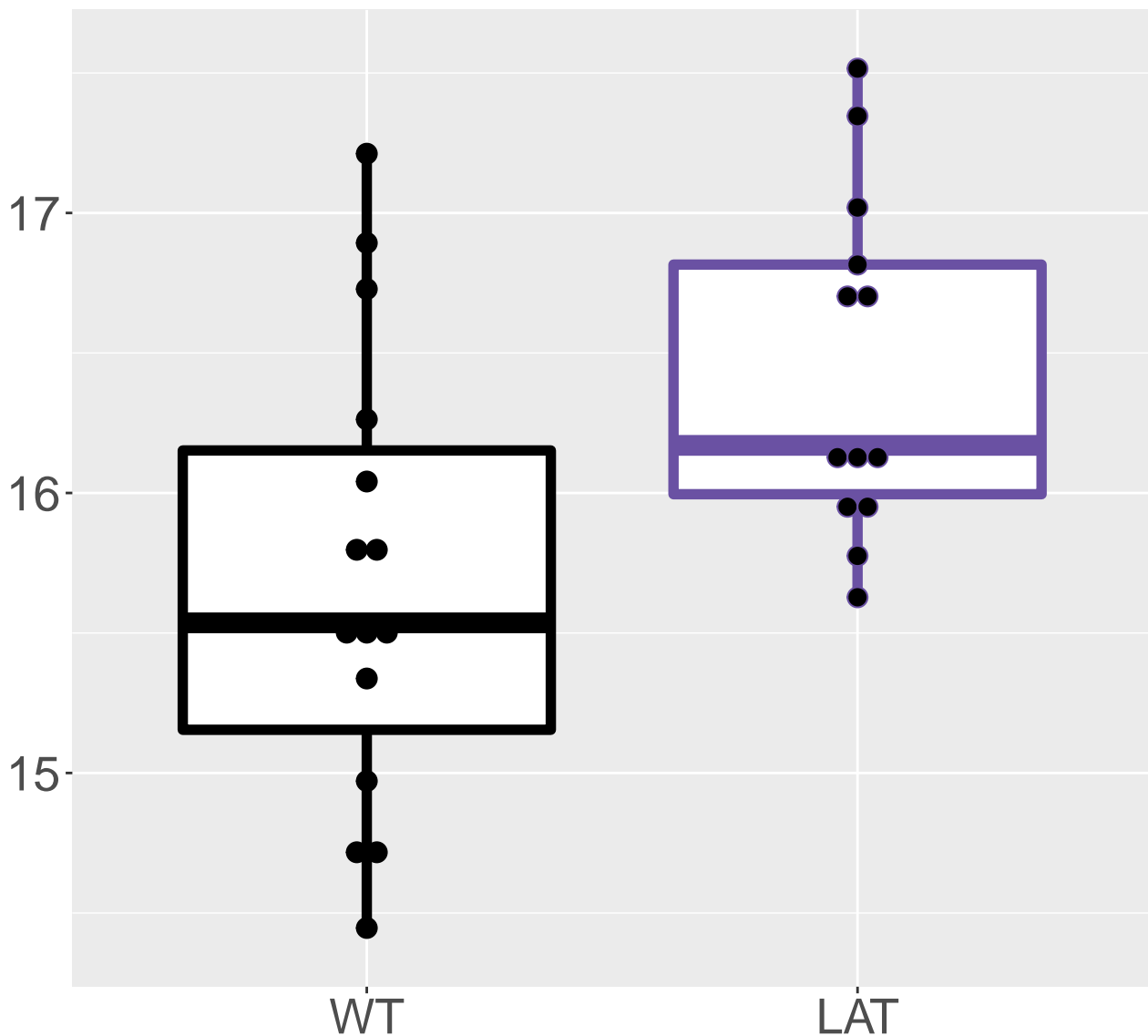
**M592.1489T418.83**

**FDR = 0.039, FC = -0.57**



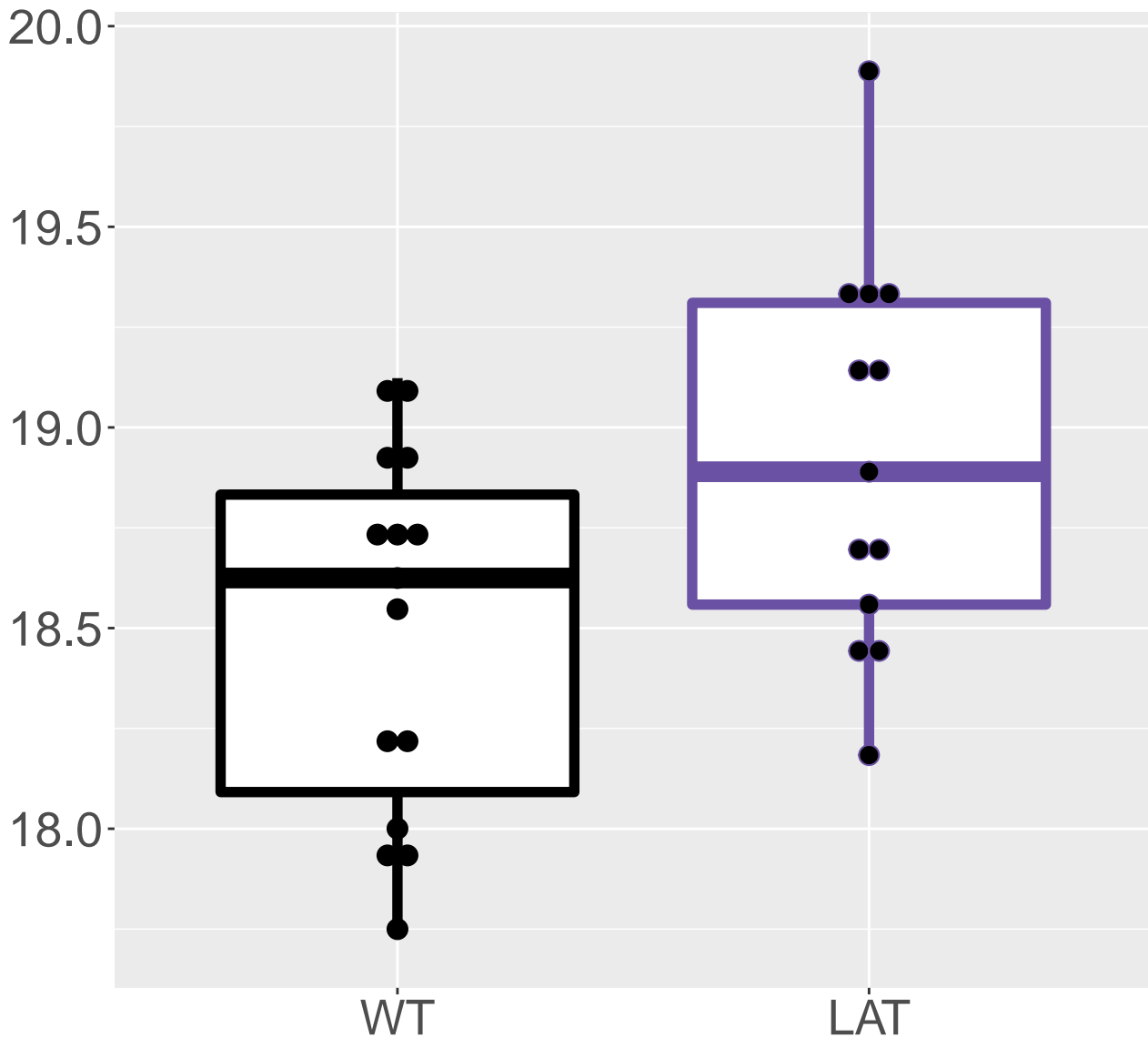
**M223.0746T392.41**

**FDR = 0.039, FC = 0.75**



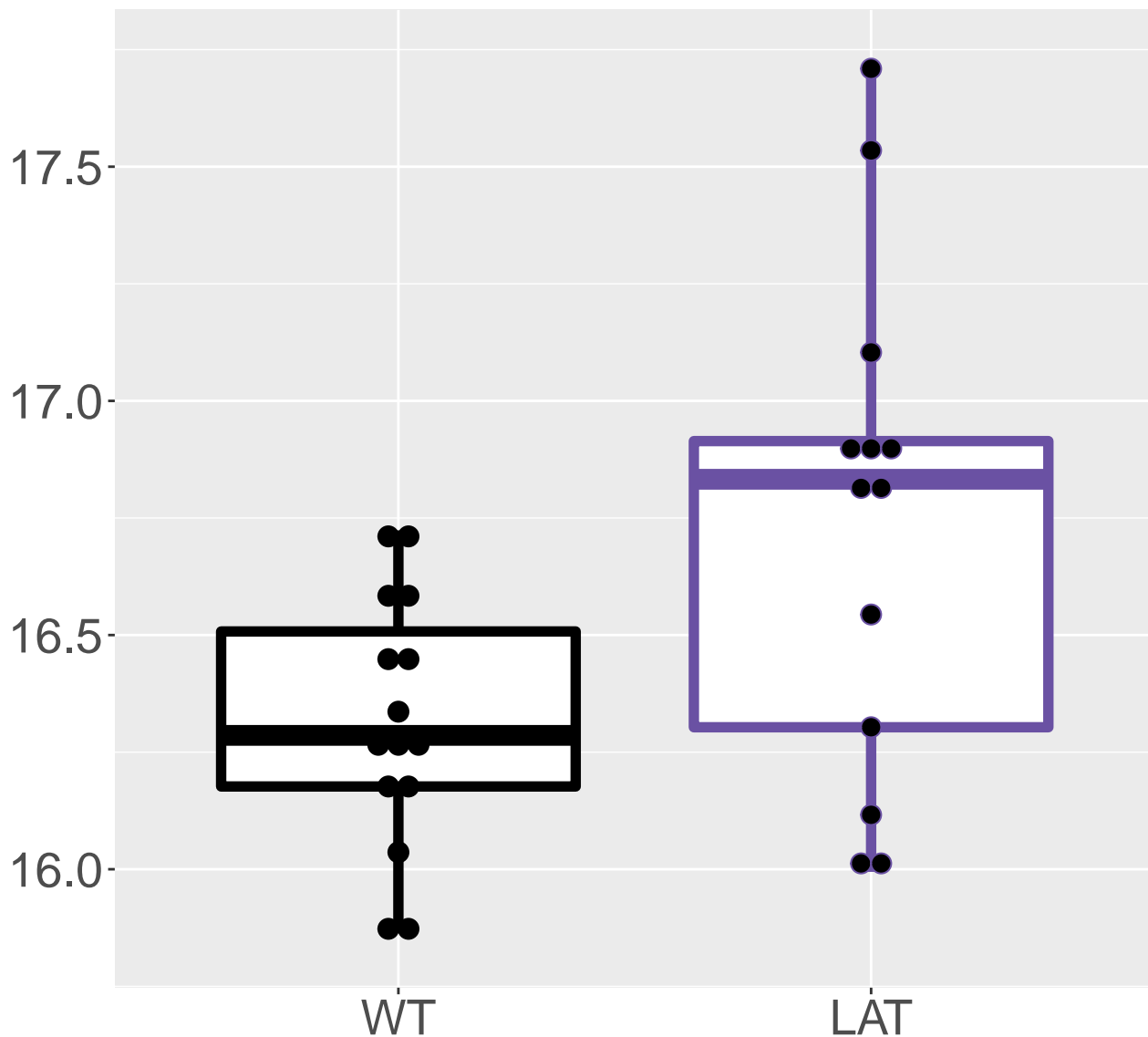
**M269.2121T80.05**

**FDR = 0.039, FC = 0.43, sex\*\***

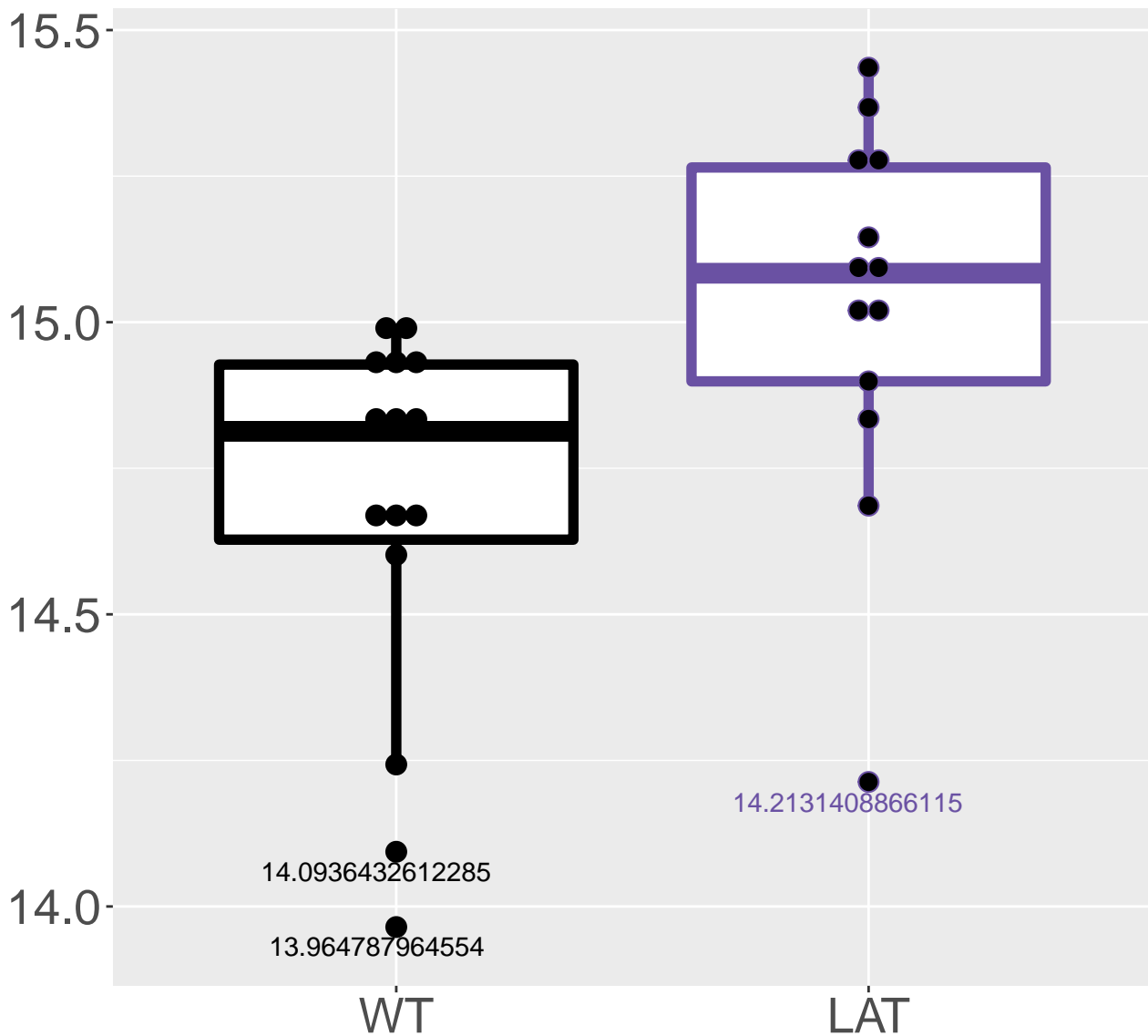


**M252.491T558.77**

**FDR = 0.039, FC = 0.43**

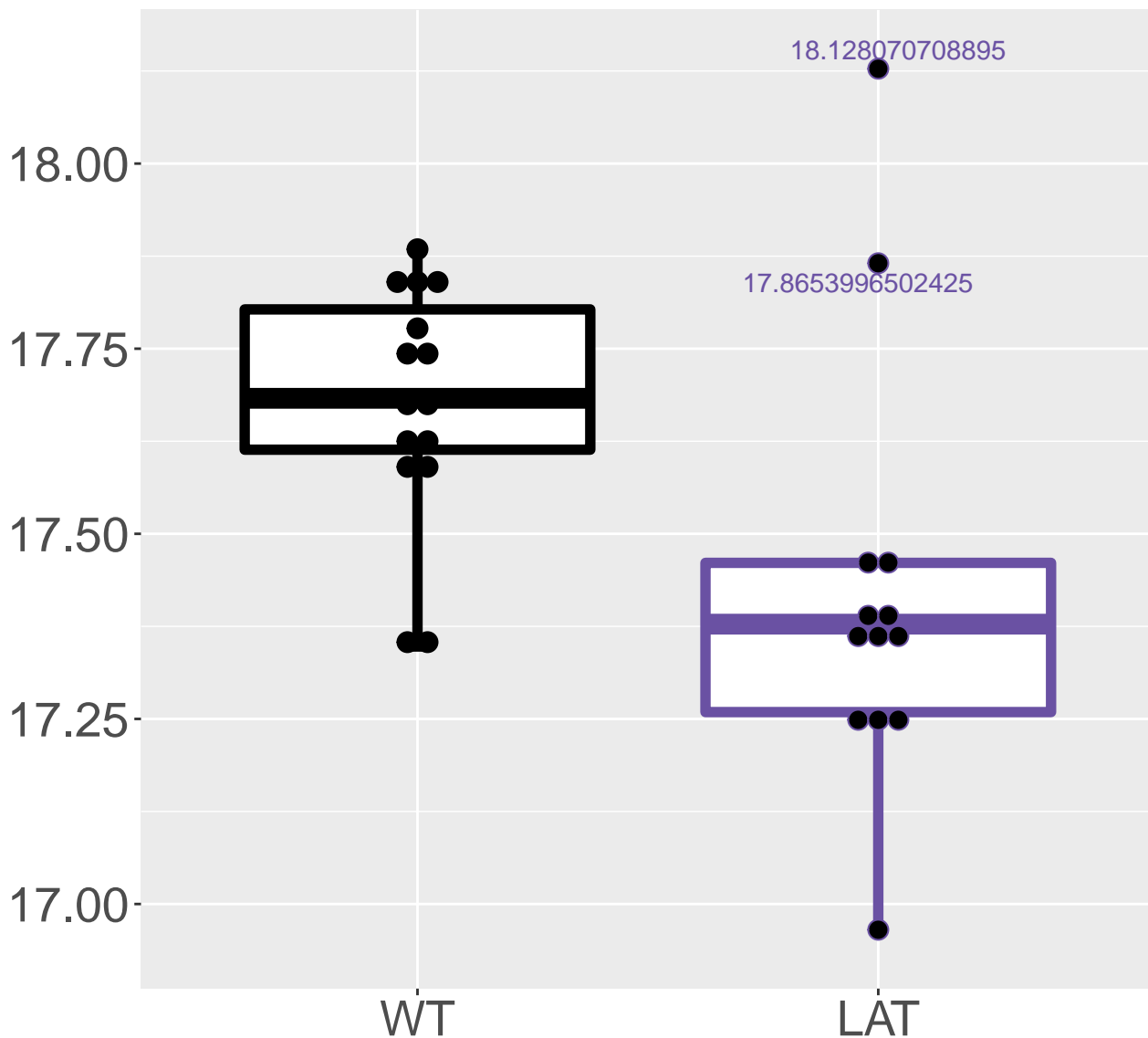


**M910.1675T404.39**  
**FDR = 0.039, FC = 0.35**



**M201.6873T78.29**

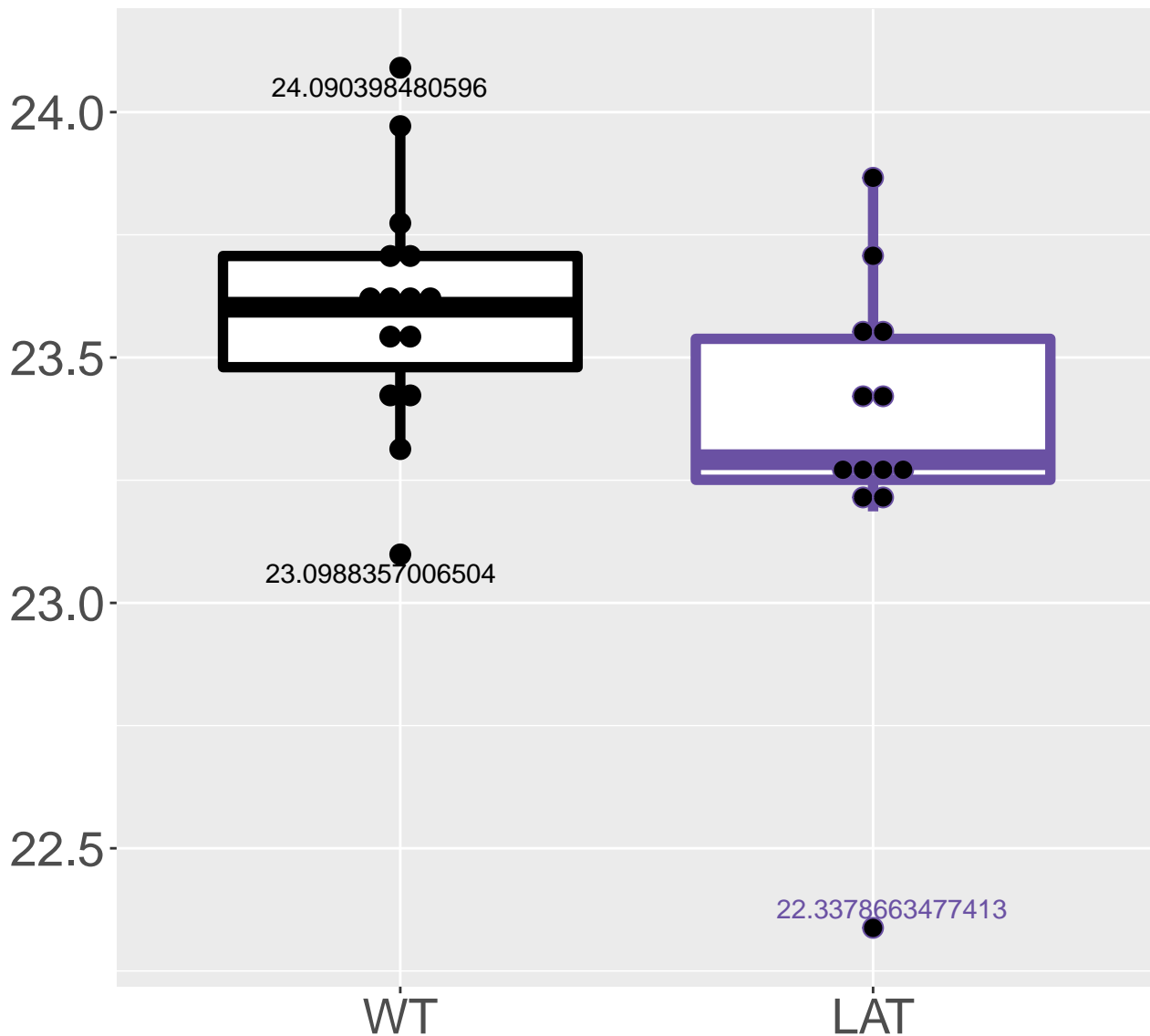
**FDR = 0.039, FC = -0.26**





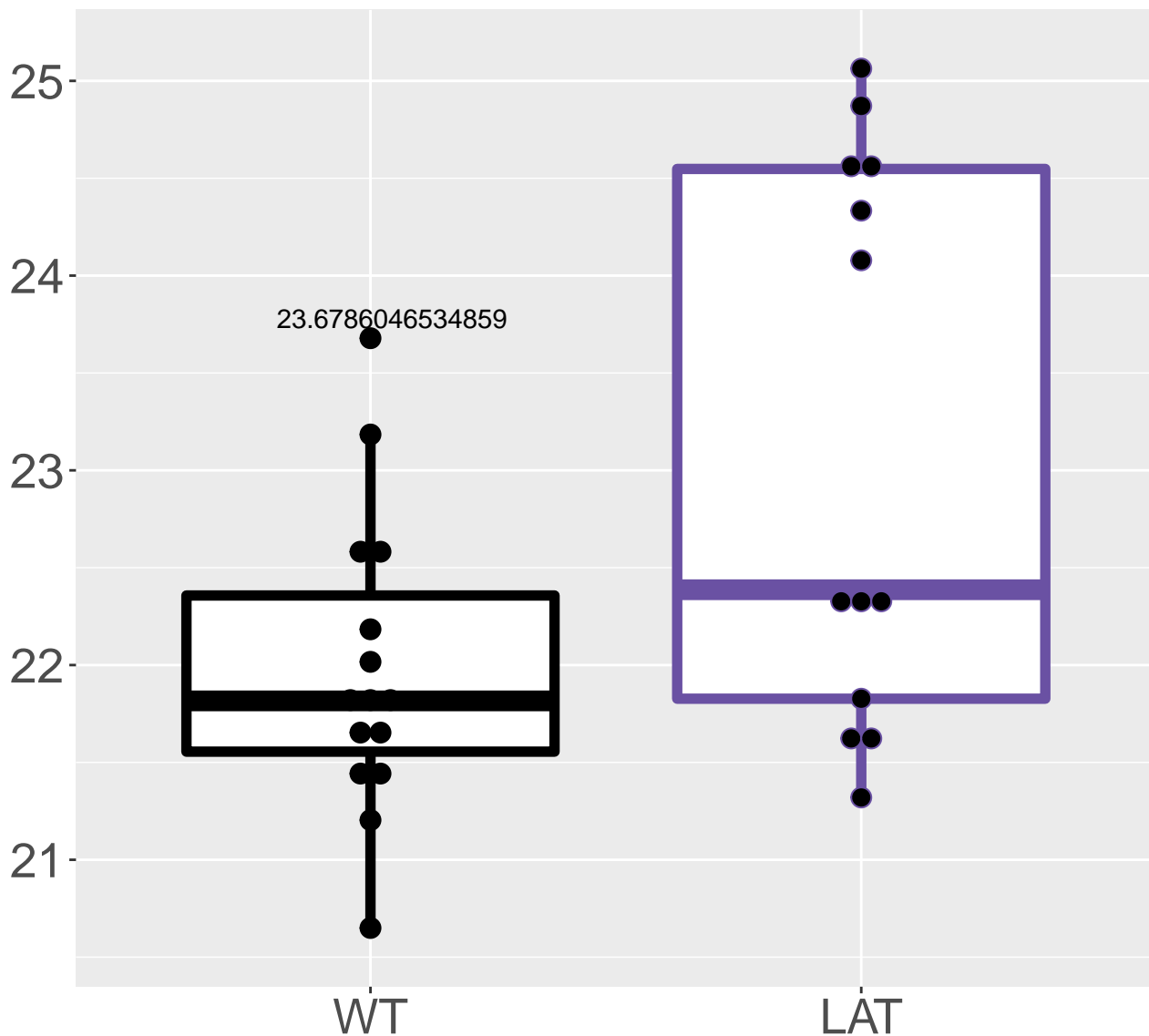
**M178.0722T438.49**

**FDR = 0.039, FC = -0.27**



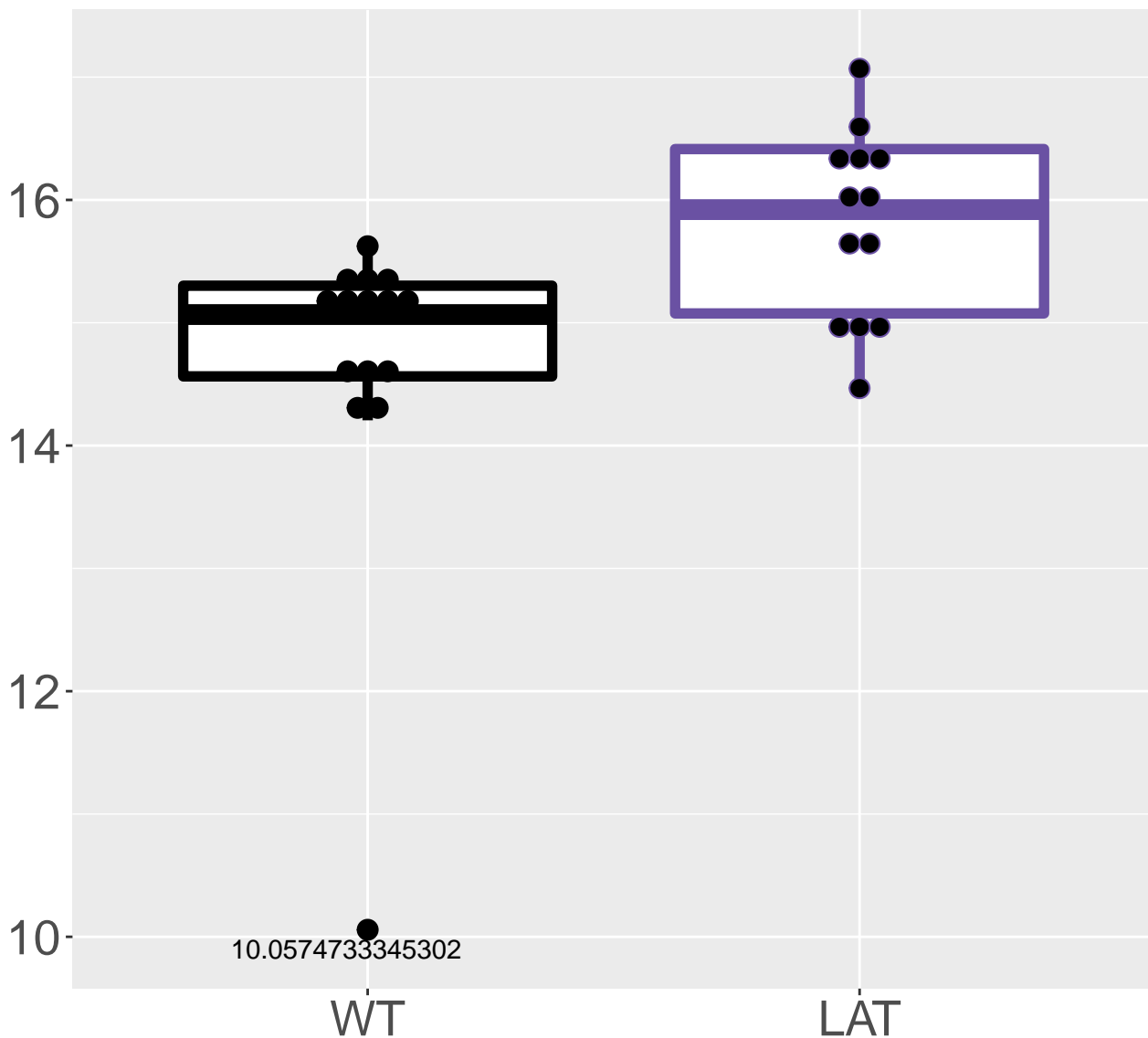
# Citric acid|Isocitric acid

FDR = 0.04, FC = 1.2

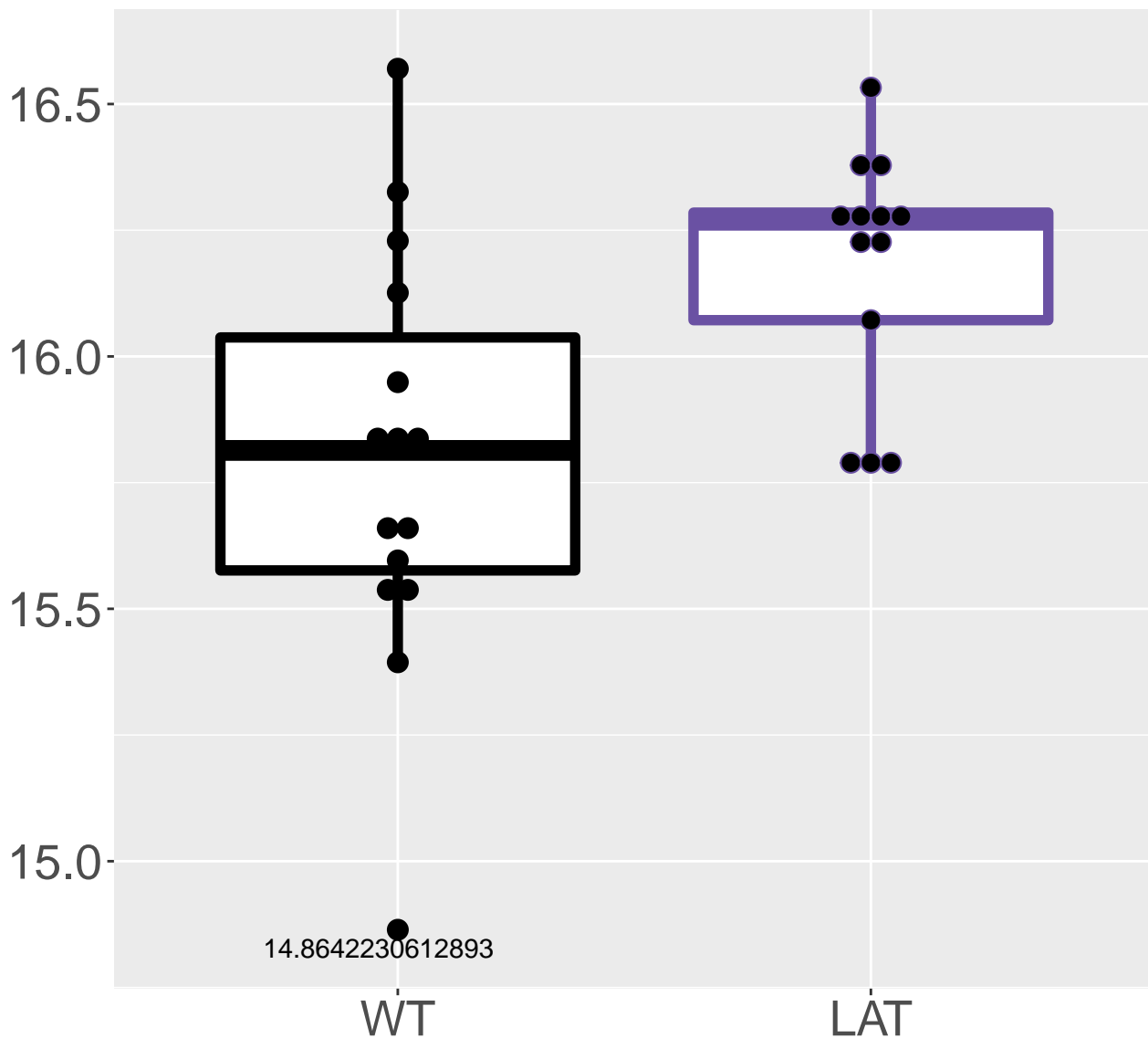


**M241.0027T673.72**

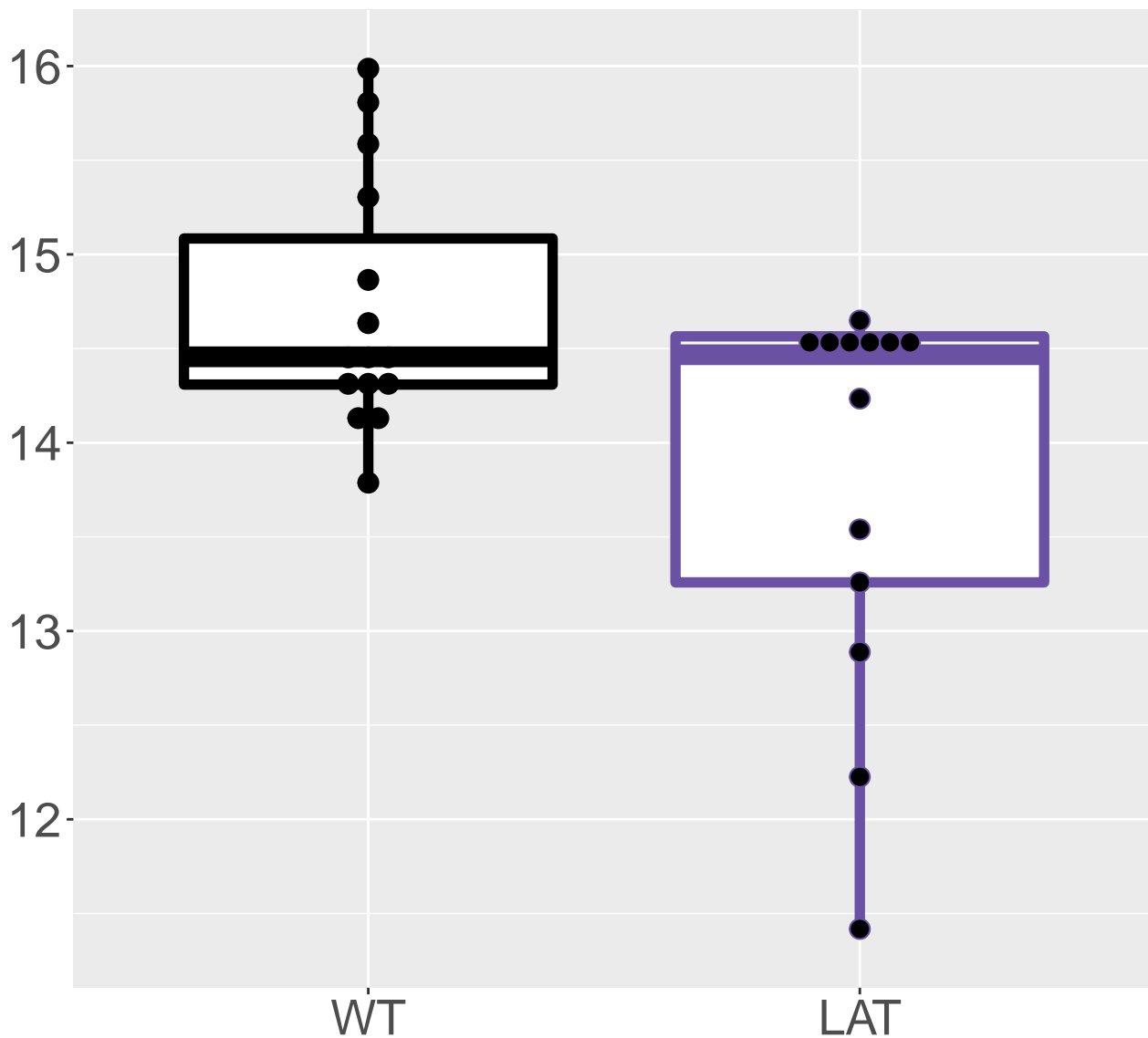
**FDR = 0.04, FC = 1.1**



**M200.0333T395.41**  
**FDR = 0.04, FC = 0.38**

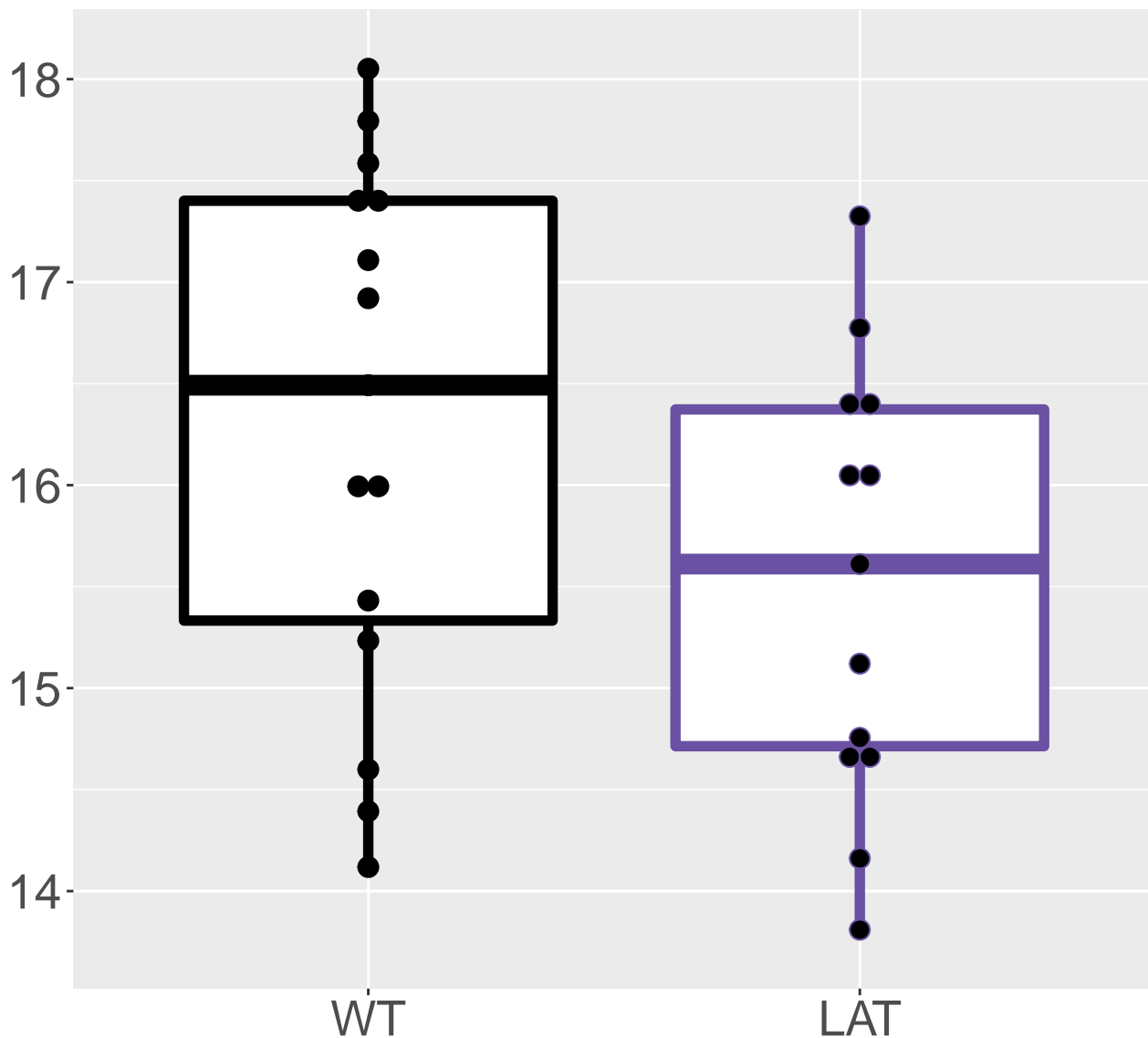


**M228.0283T397.45\_1**  
**FDR = 0.04, FC = -0.9**

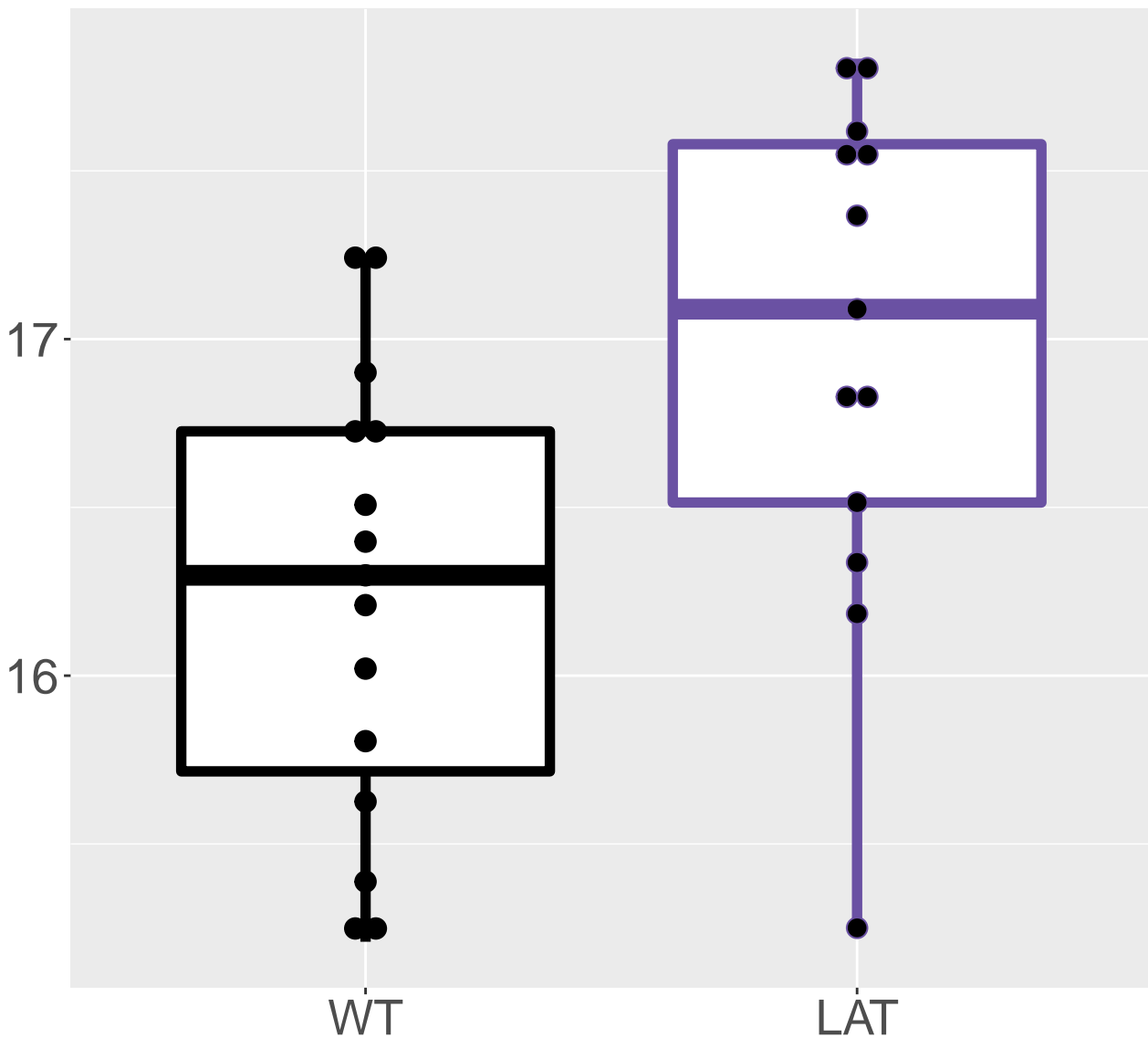


**M376.1366T322.49**

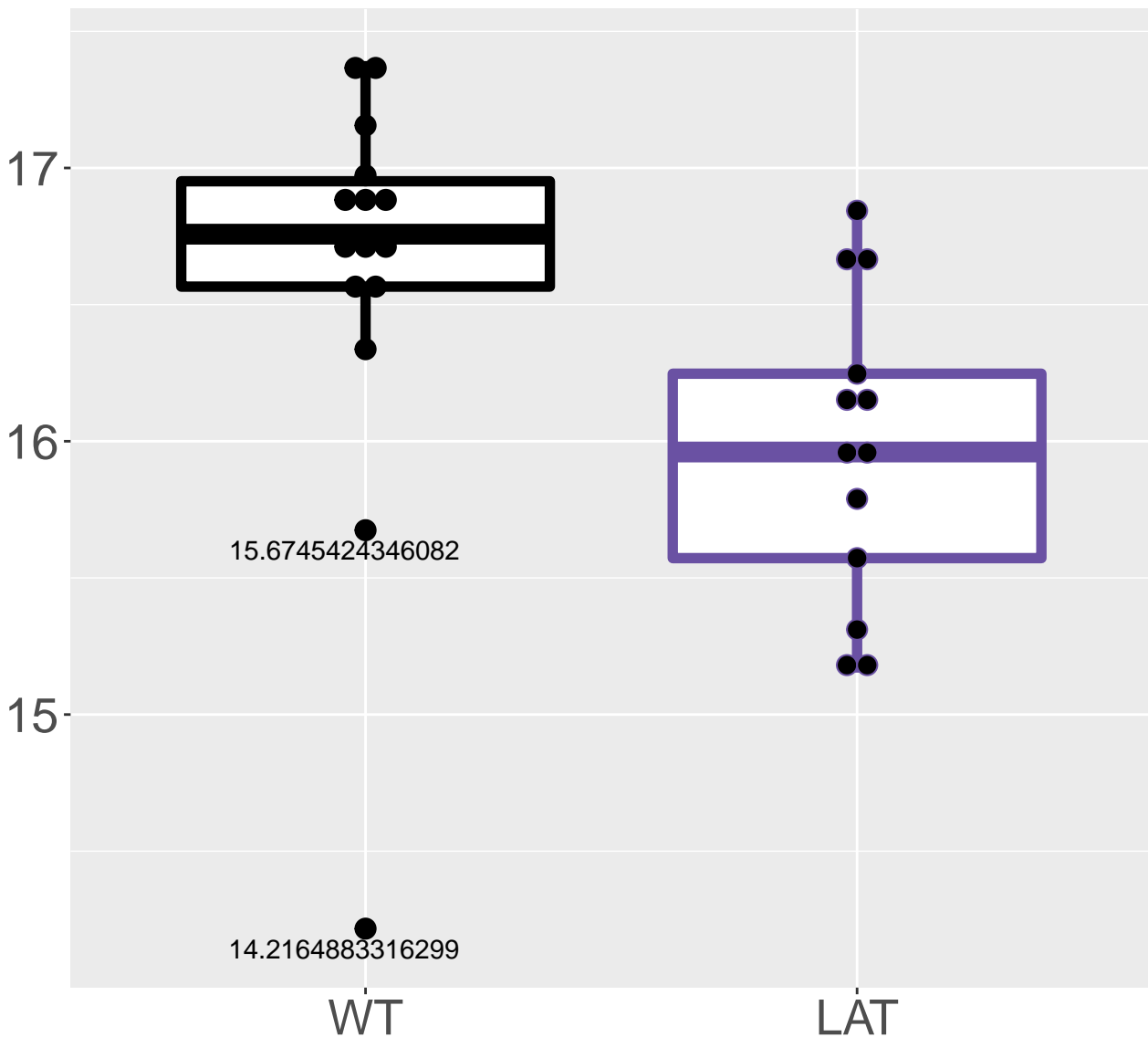
**FDR = 0.04, FC = -0.78, sex\*\***



**M918.7213T596.1\_1**  
**FDR = 0.04, FC = 0.74**



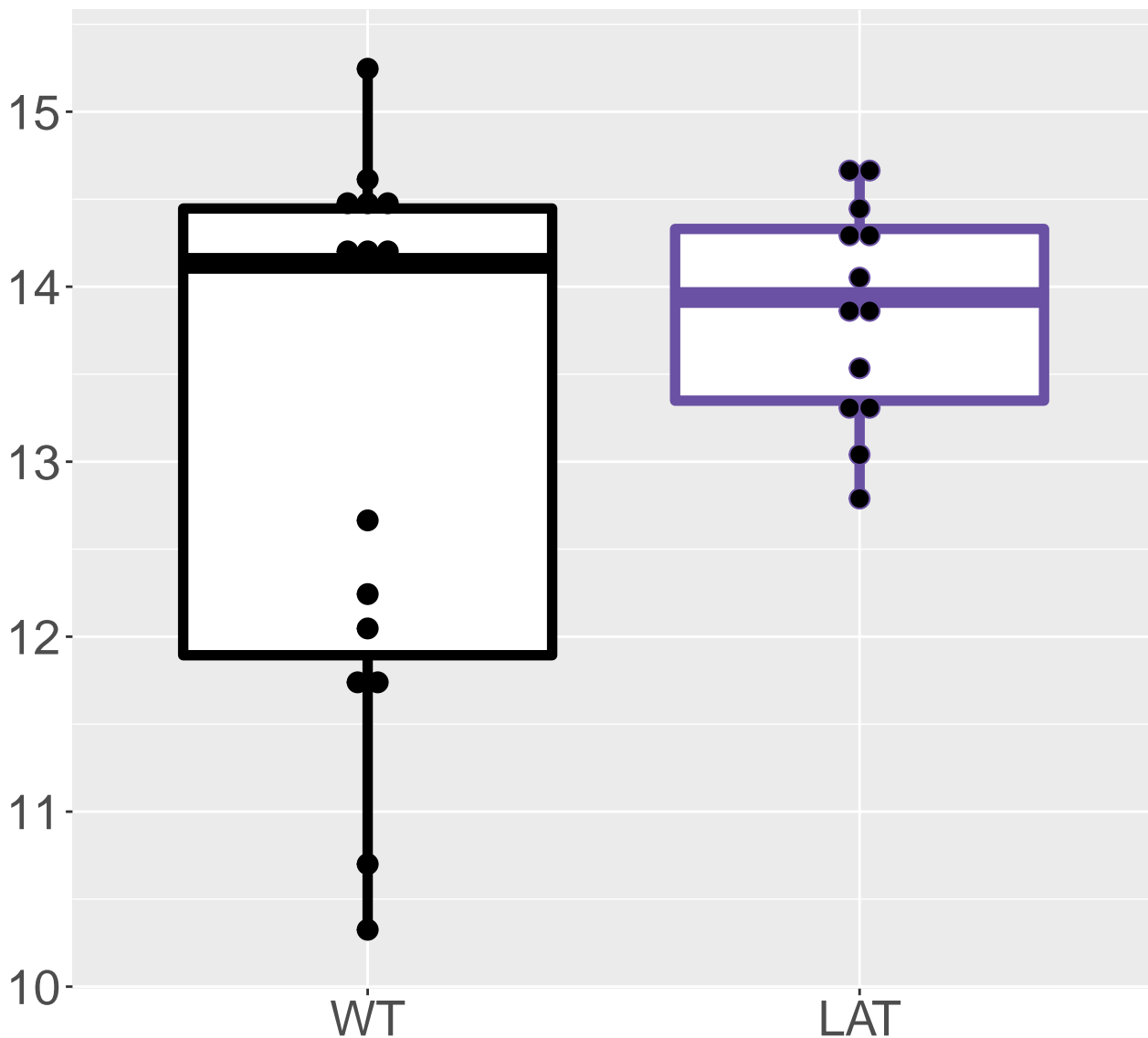
**M293.0635T588.57**  
**FDR = 0.041, FC = -0.62**





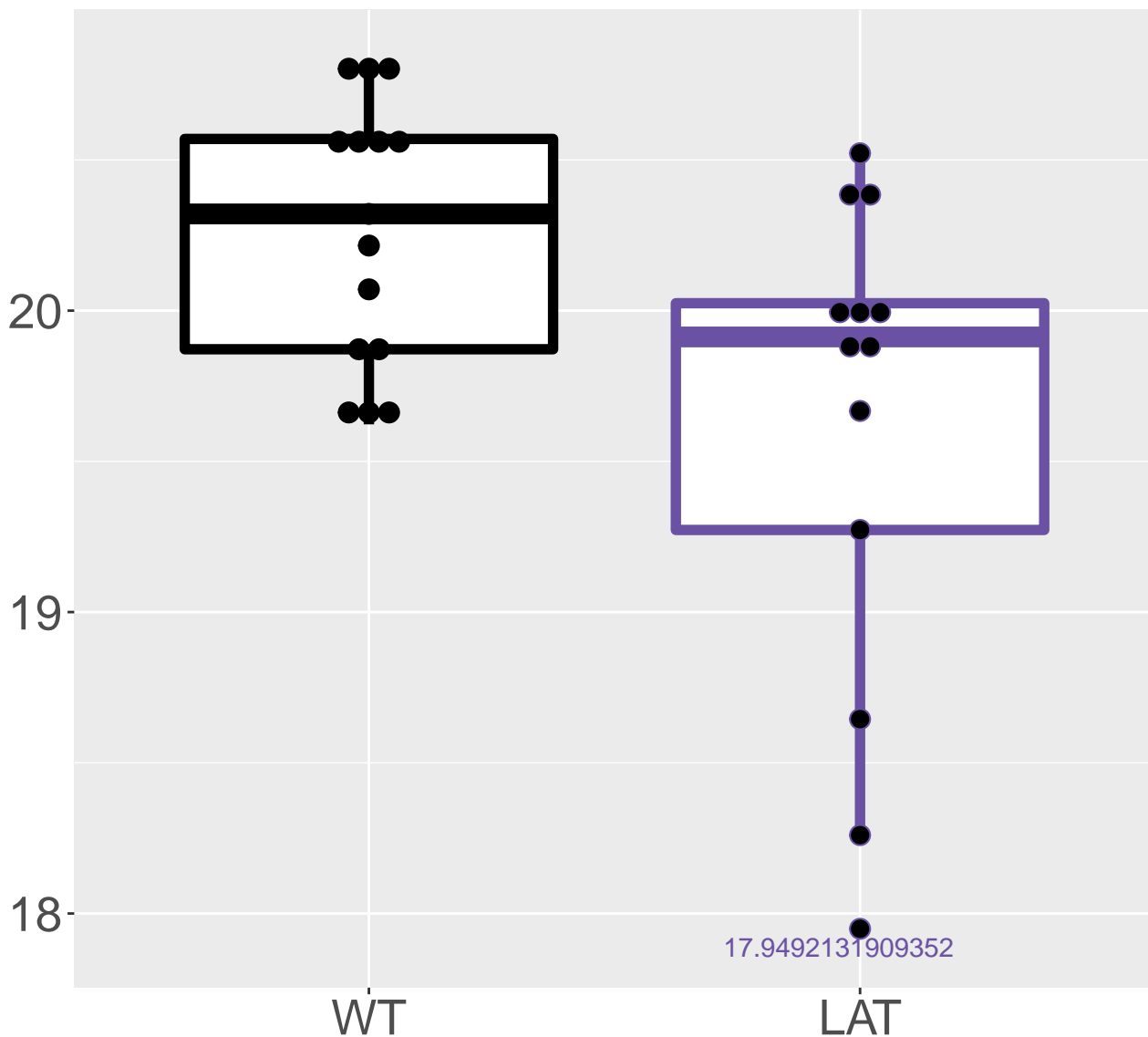
**M261.0288T535.57**

**FDR = 0.041, FC = 0.7, sex\*\*\***



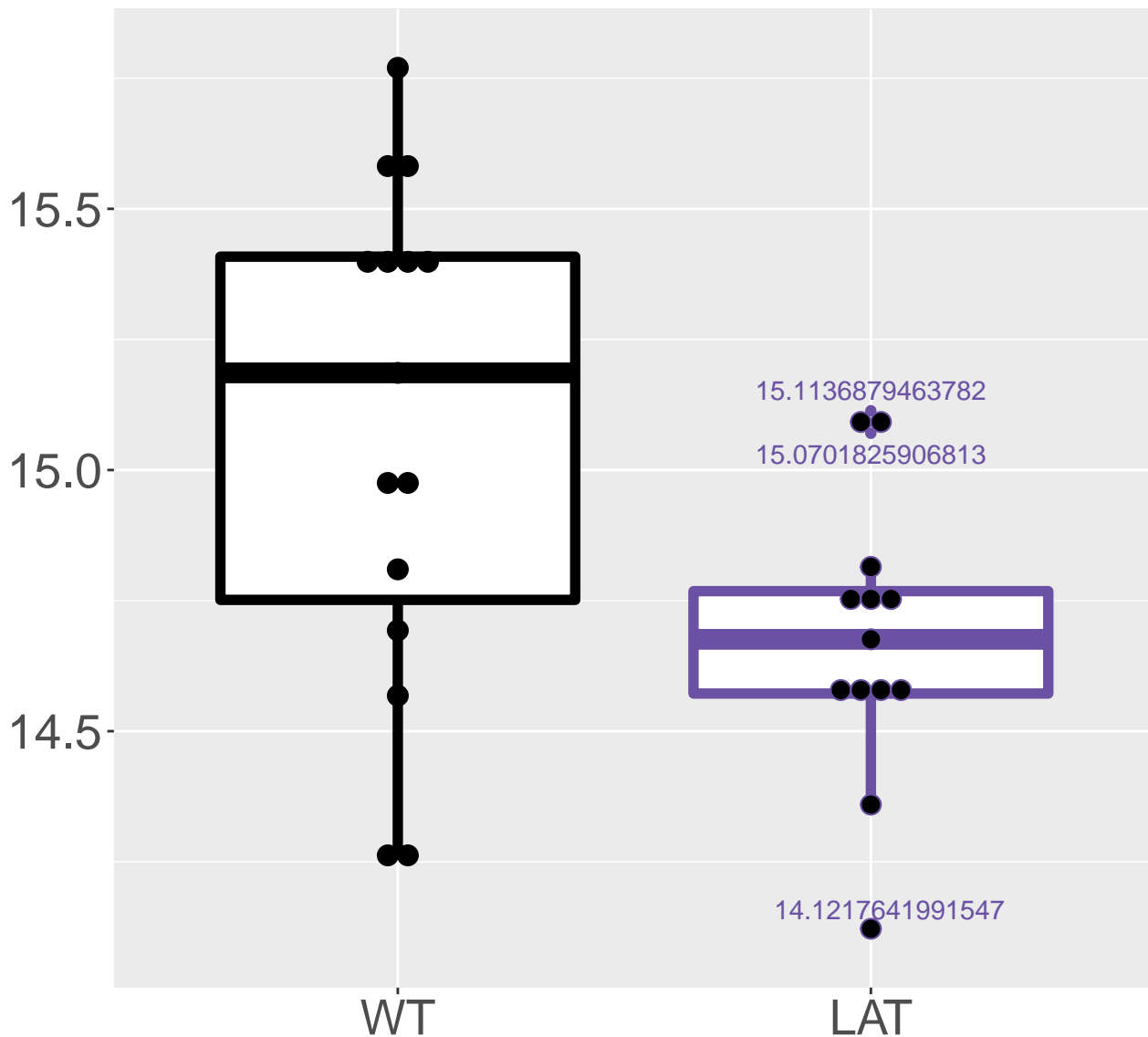
**M524.1754T529.45**

**FDR = 0.041, FC = -0.66**

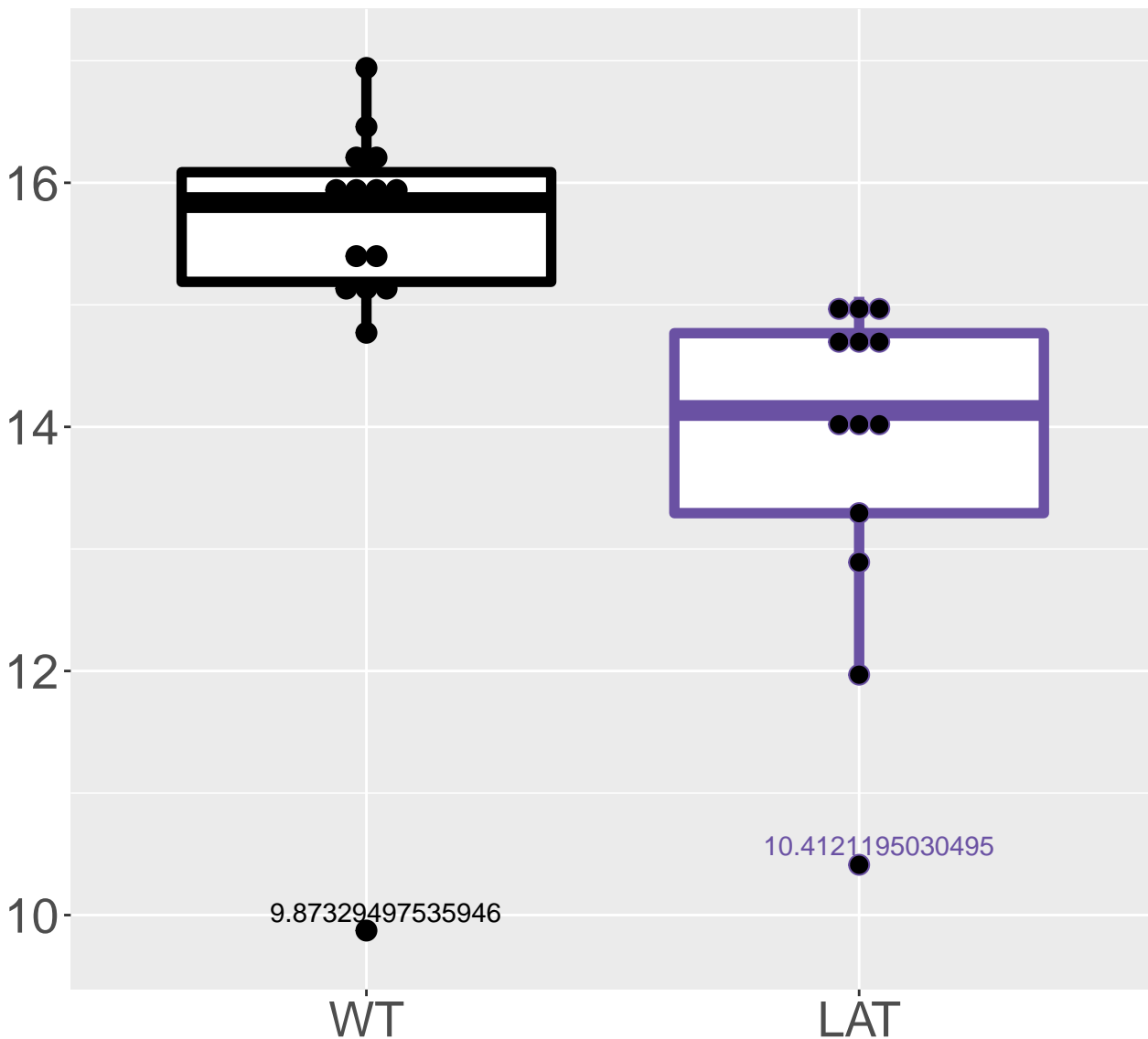


**M550.1631T514.8**

**FDR = 0.041, FC = -0.41**

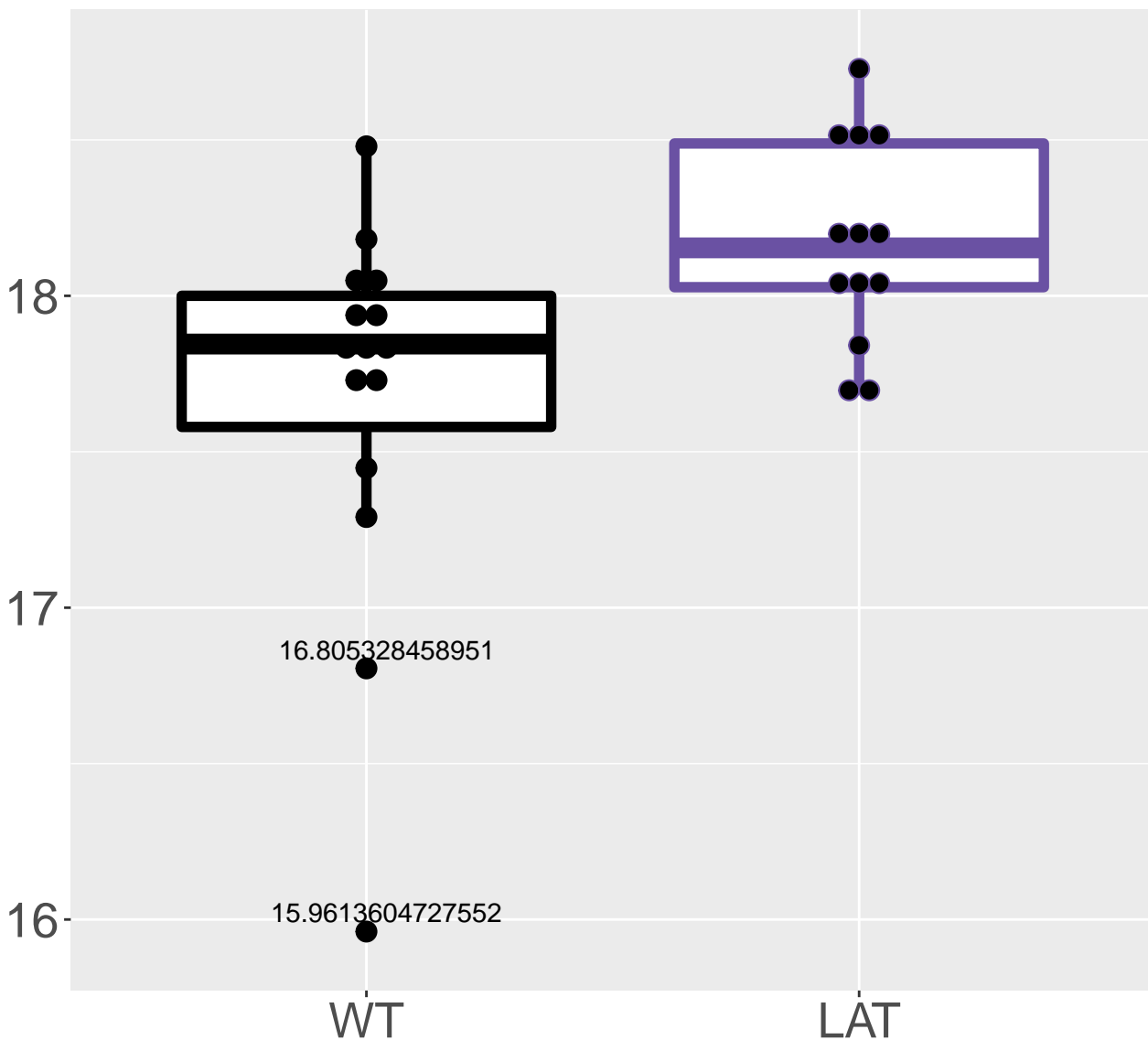


**M581.1333T533.1**  
**FDR = 0.042, FC = -1.5**



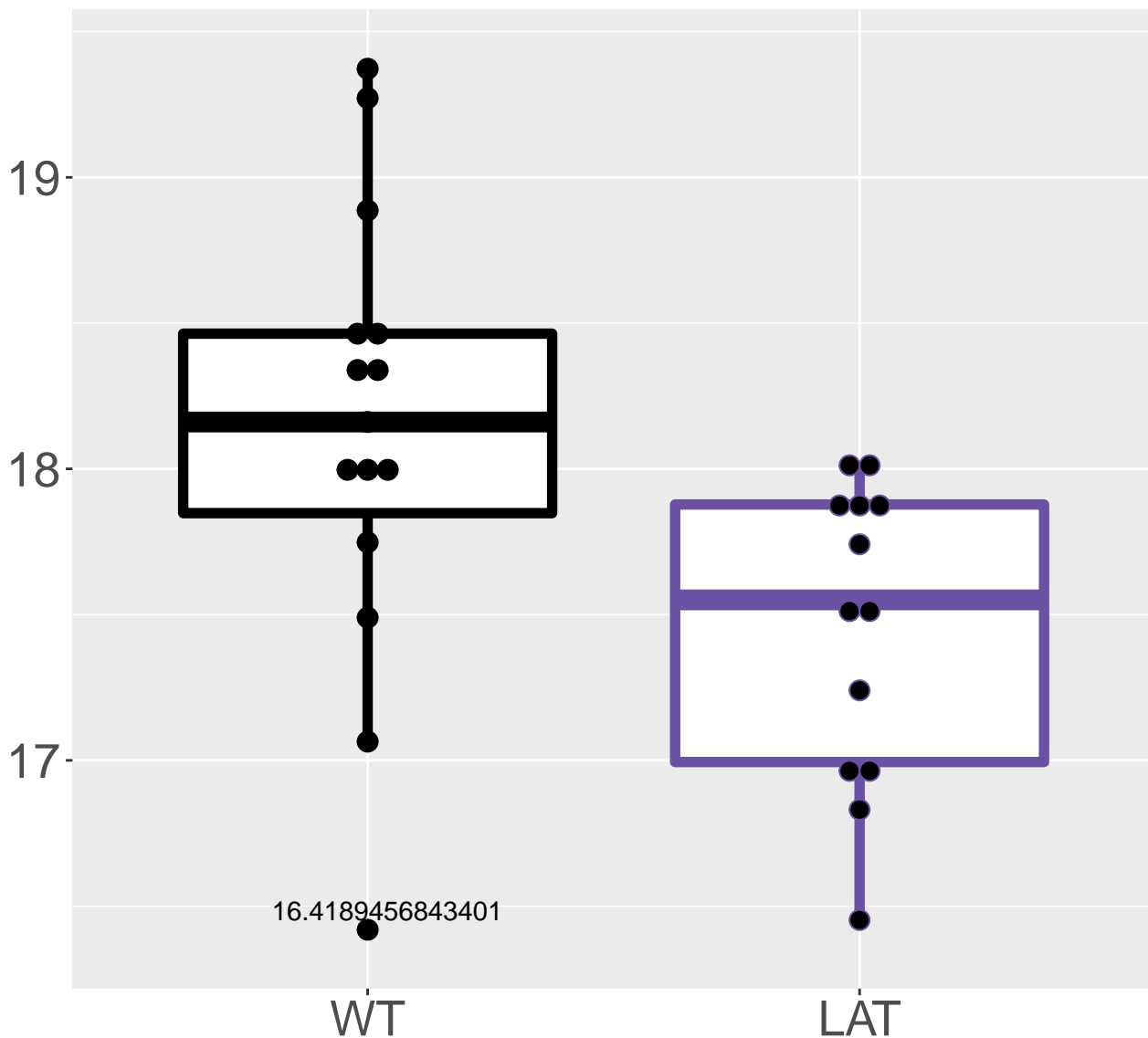
**M307.0903T444.06**

**FDR = 0.043, FC = 0.49**



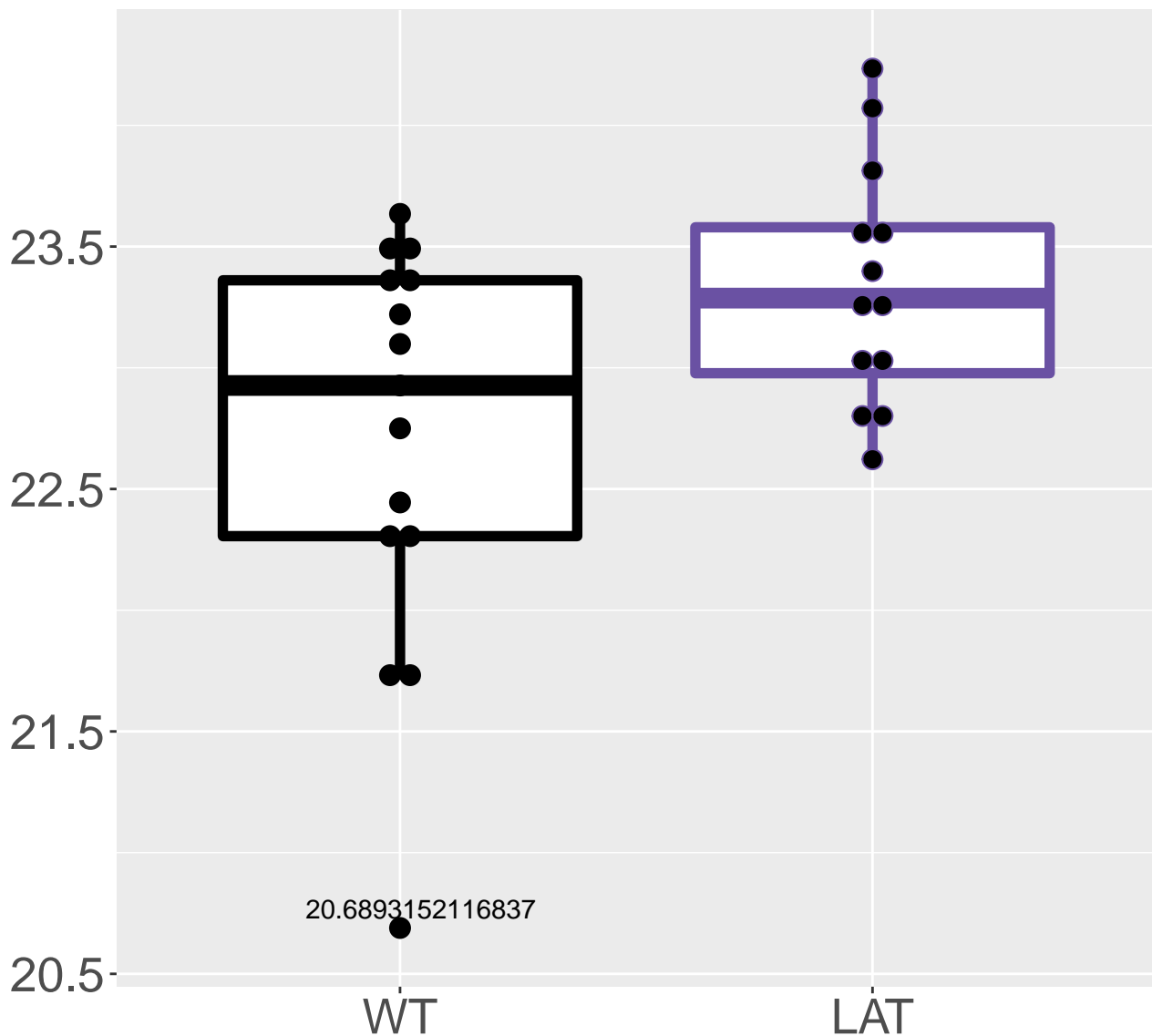
**M384.1157T405.75**

**FDR = 0.043, FC = -0.68**

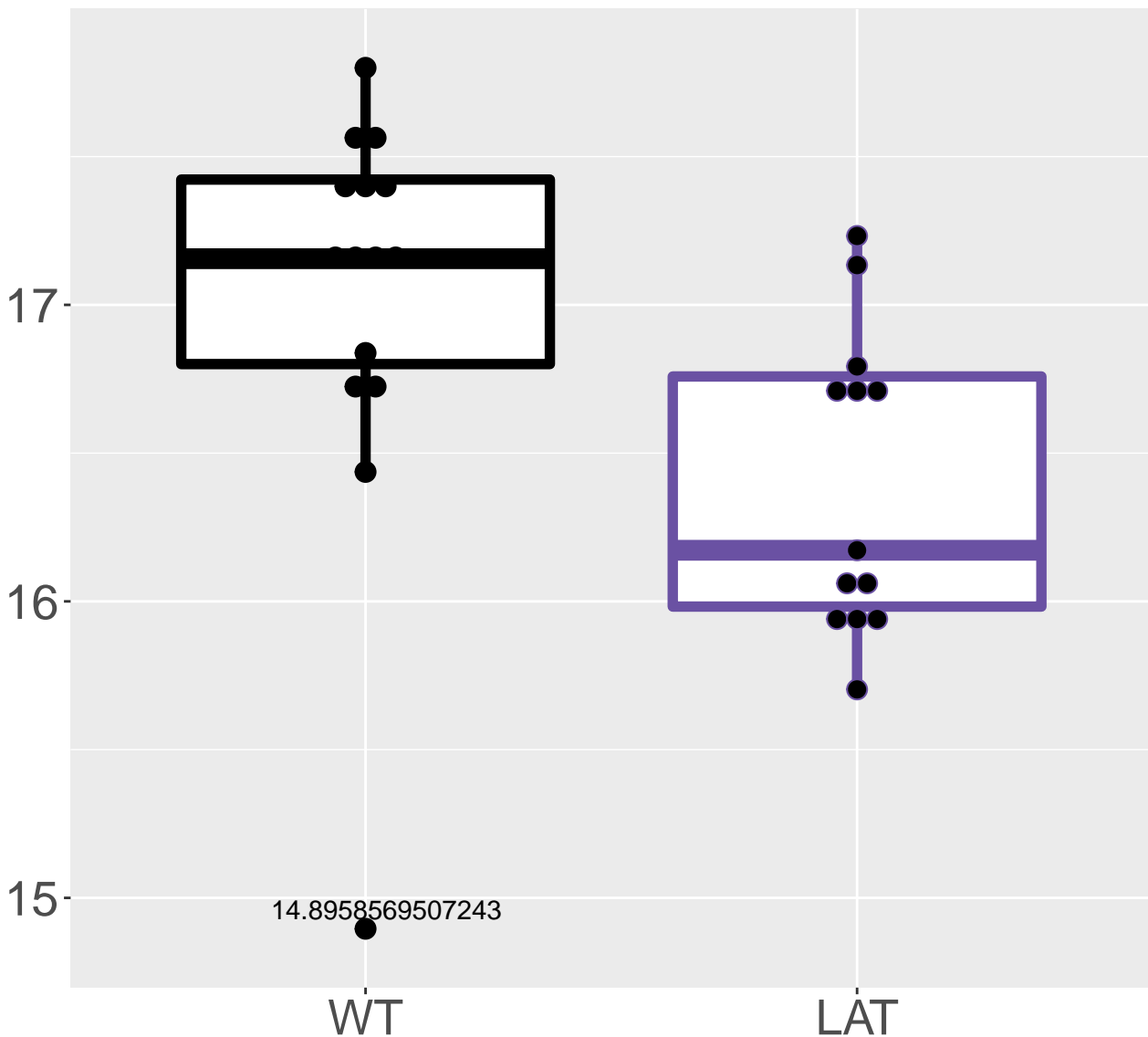


# Glycerol 3-phosphate

FDR = 0.043, FC = 0.64



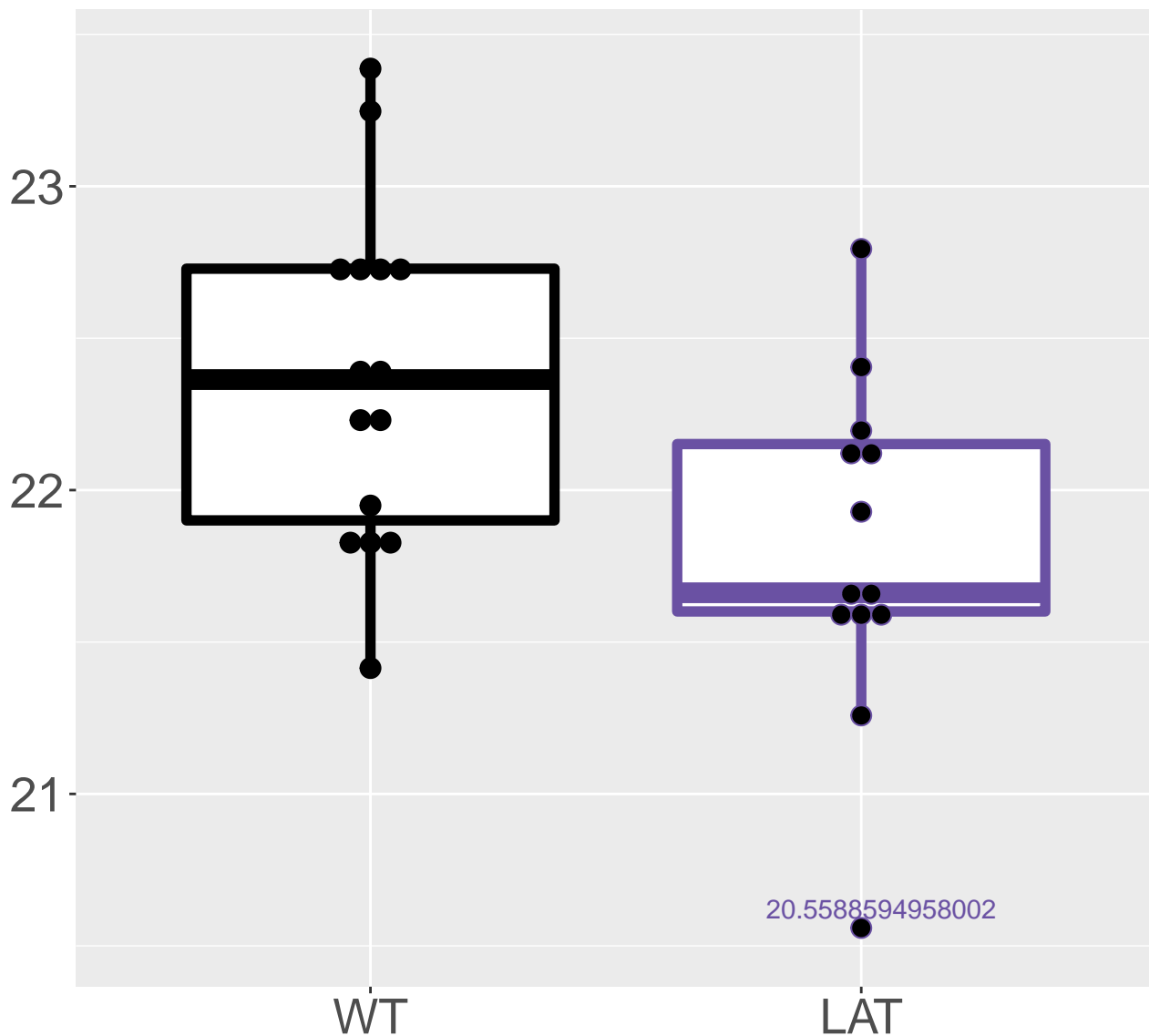
**M638.1871T570.67**  
**FDR = 0.043, FC = -0.63**





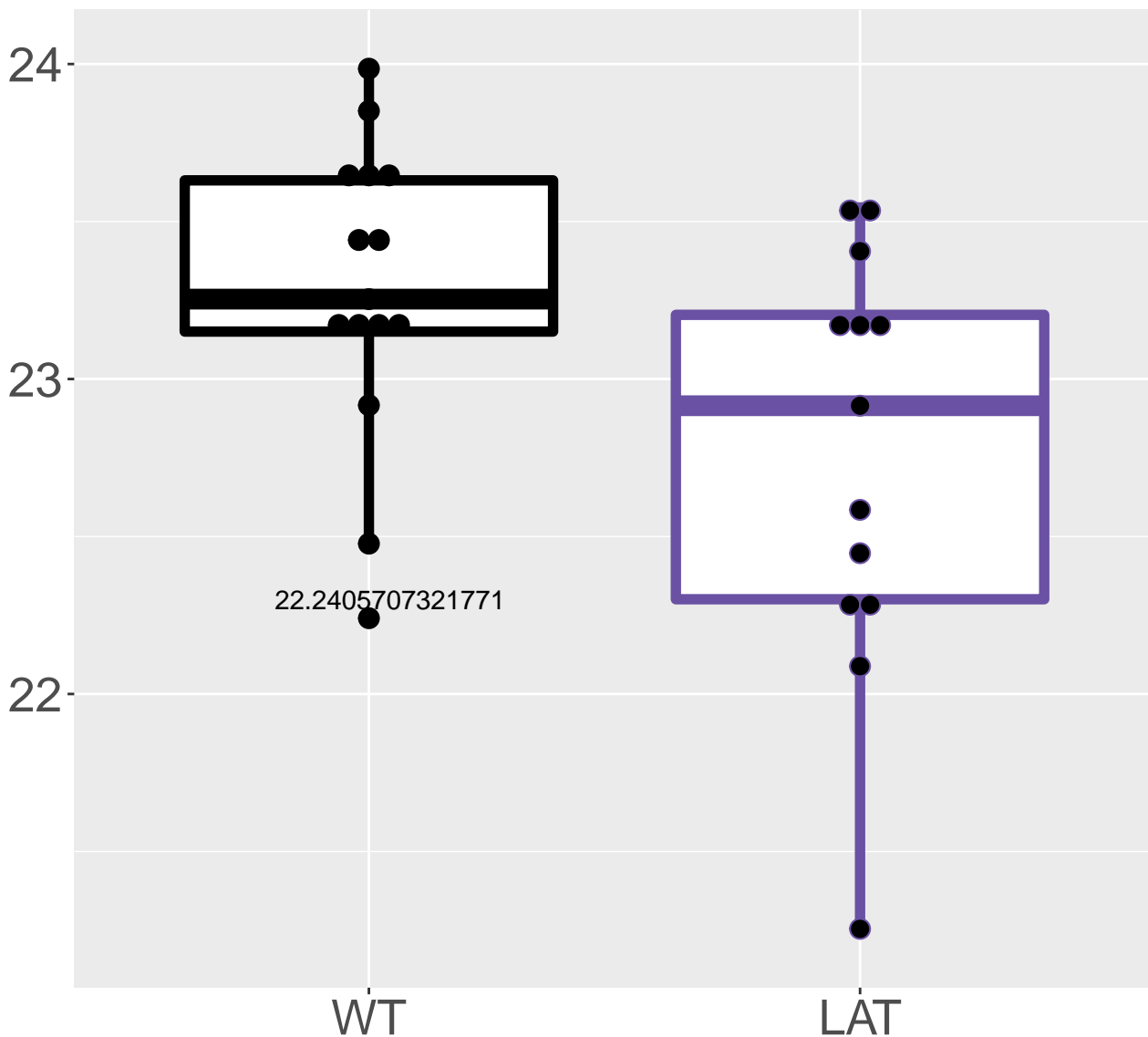
**M209.0669T442.29**

**FDR = 0.044, FC = -0.57**



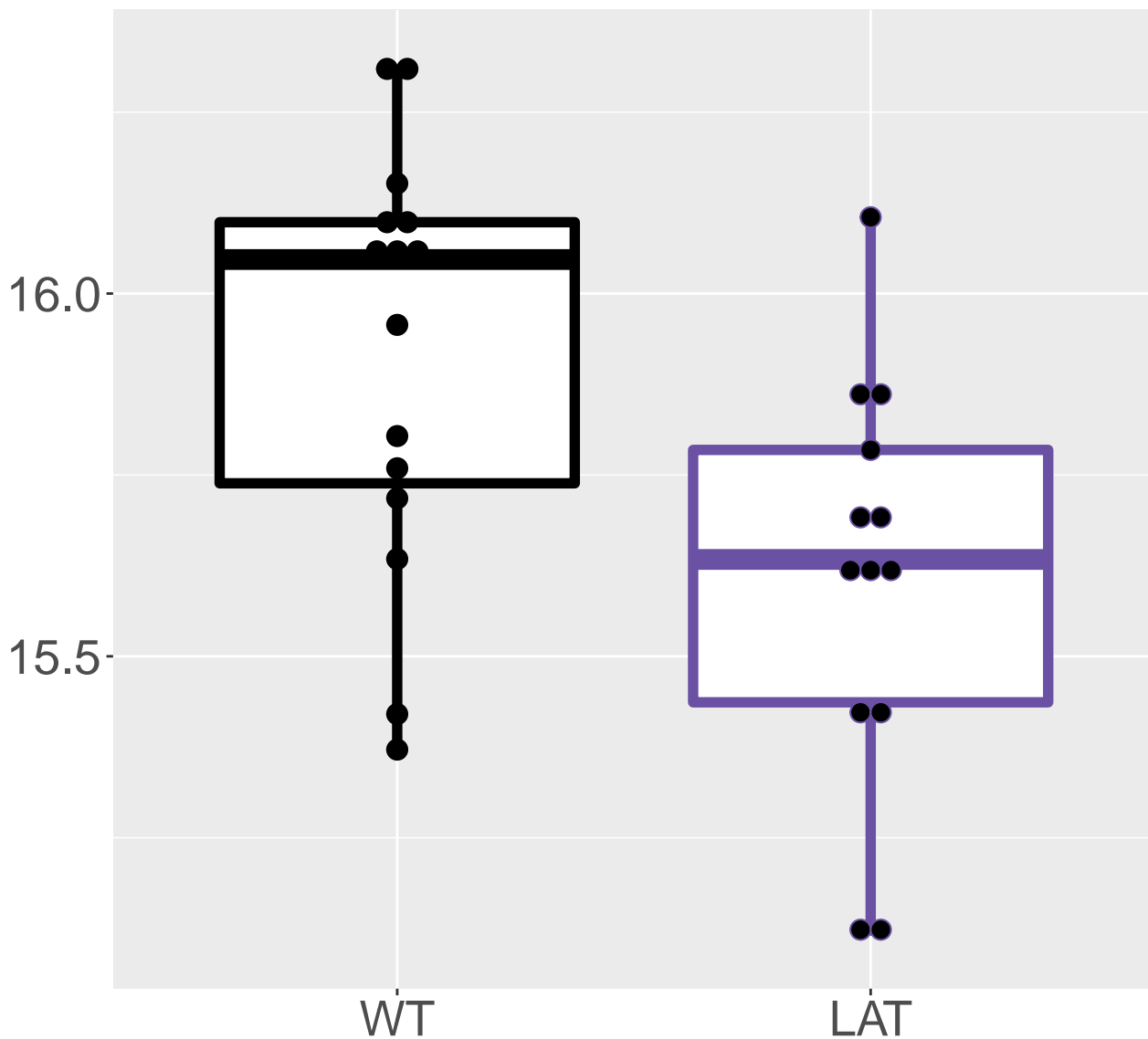
**M225.063T260.53**

**FDR = 0.044, FC = -0.53**



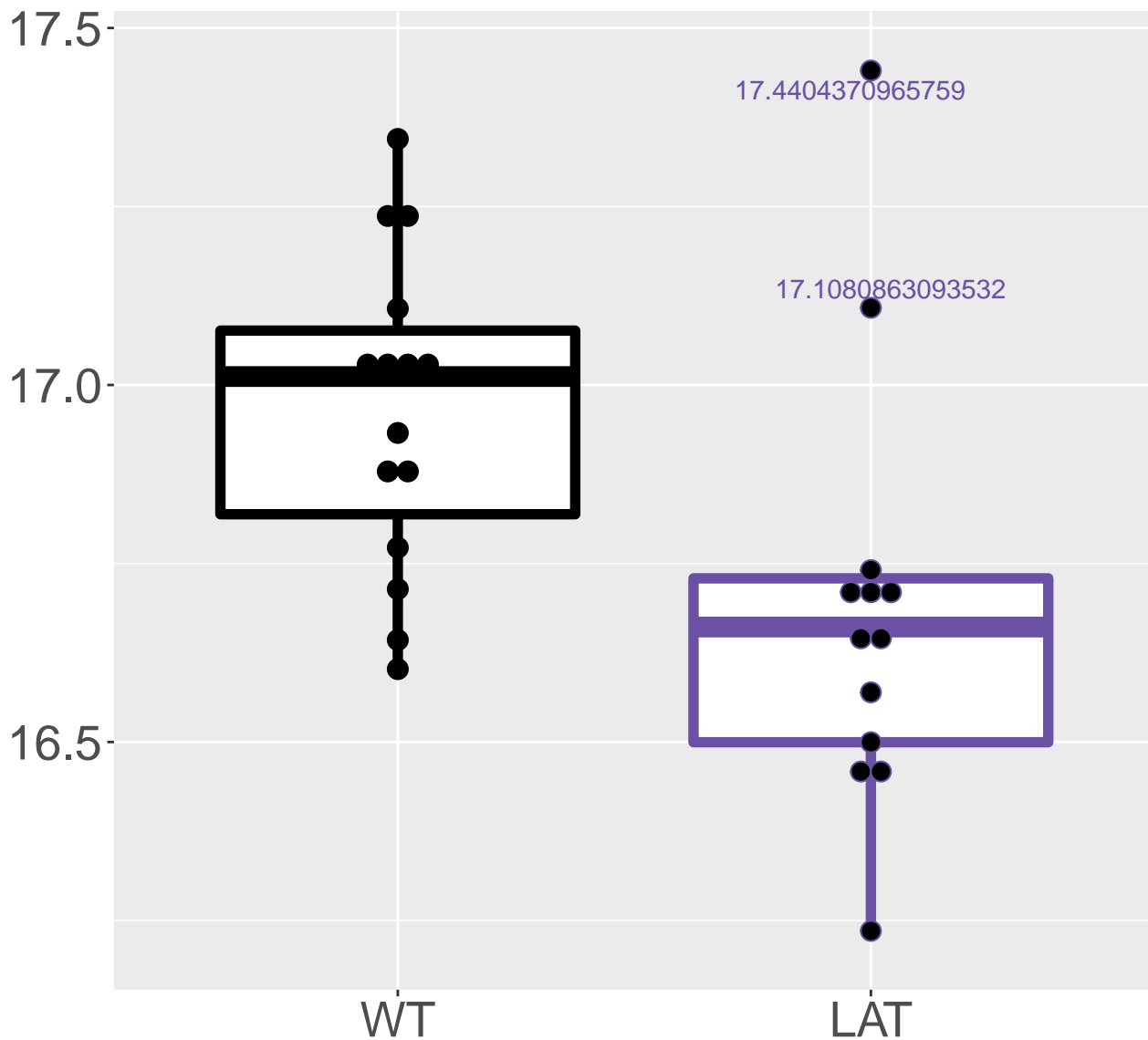
**M345.0957T348.78**

**FDR = 0.044, FC = -0.31**



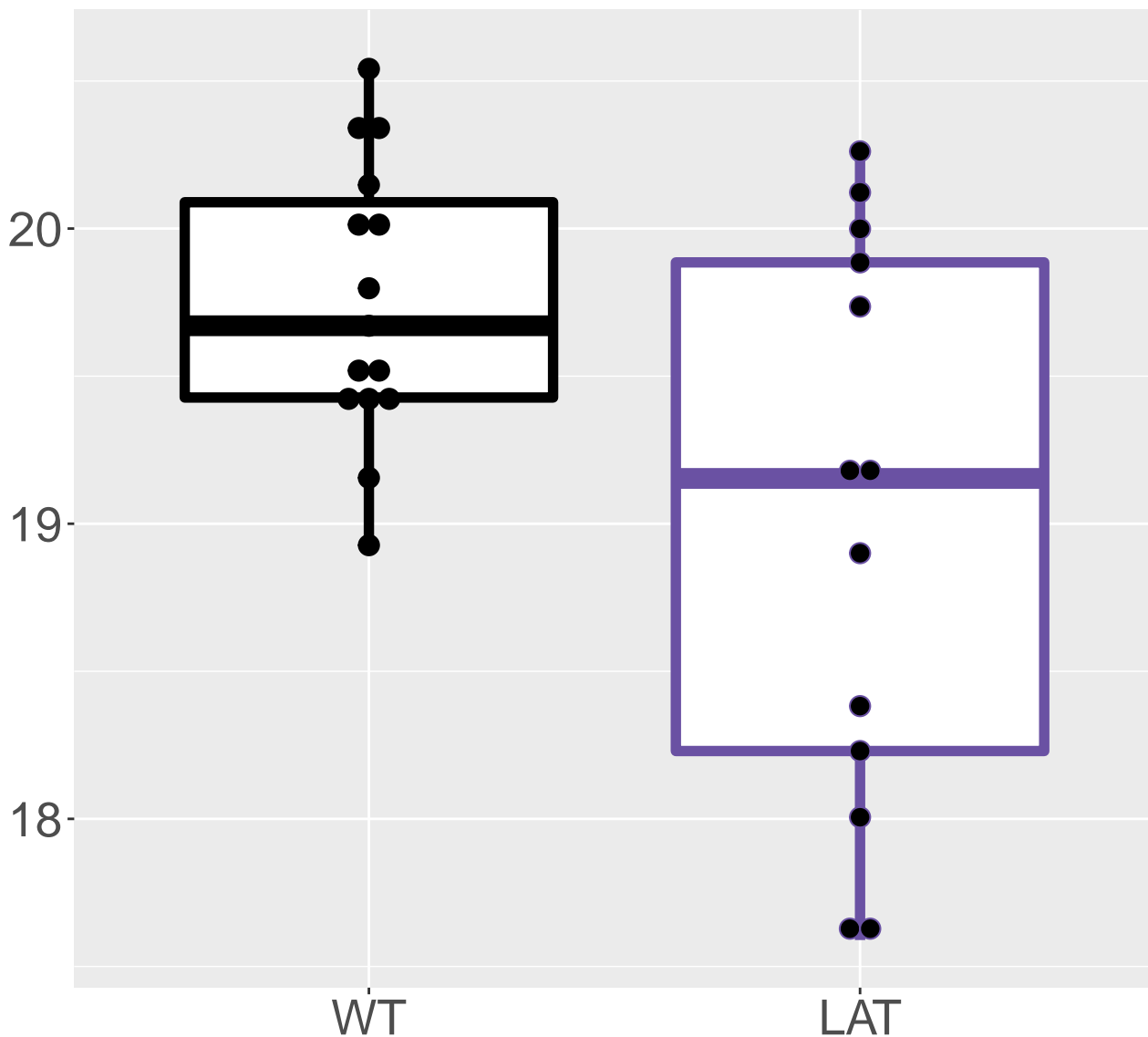
**M193.5943T78.34**

**FDR = 0.044, FC = -0.28**

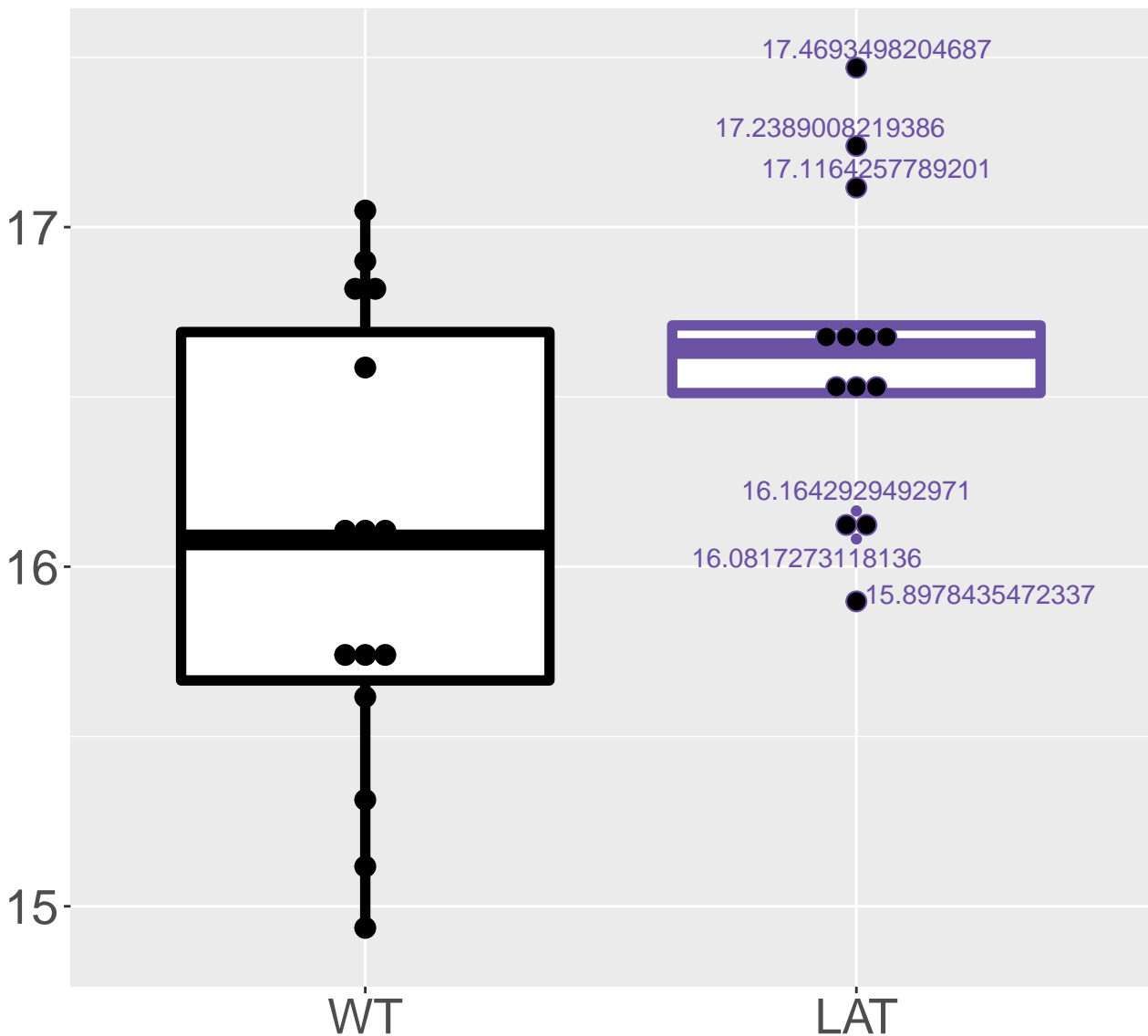


**M329.1125T525.67**

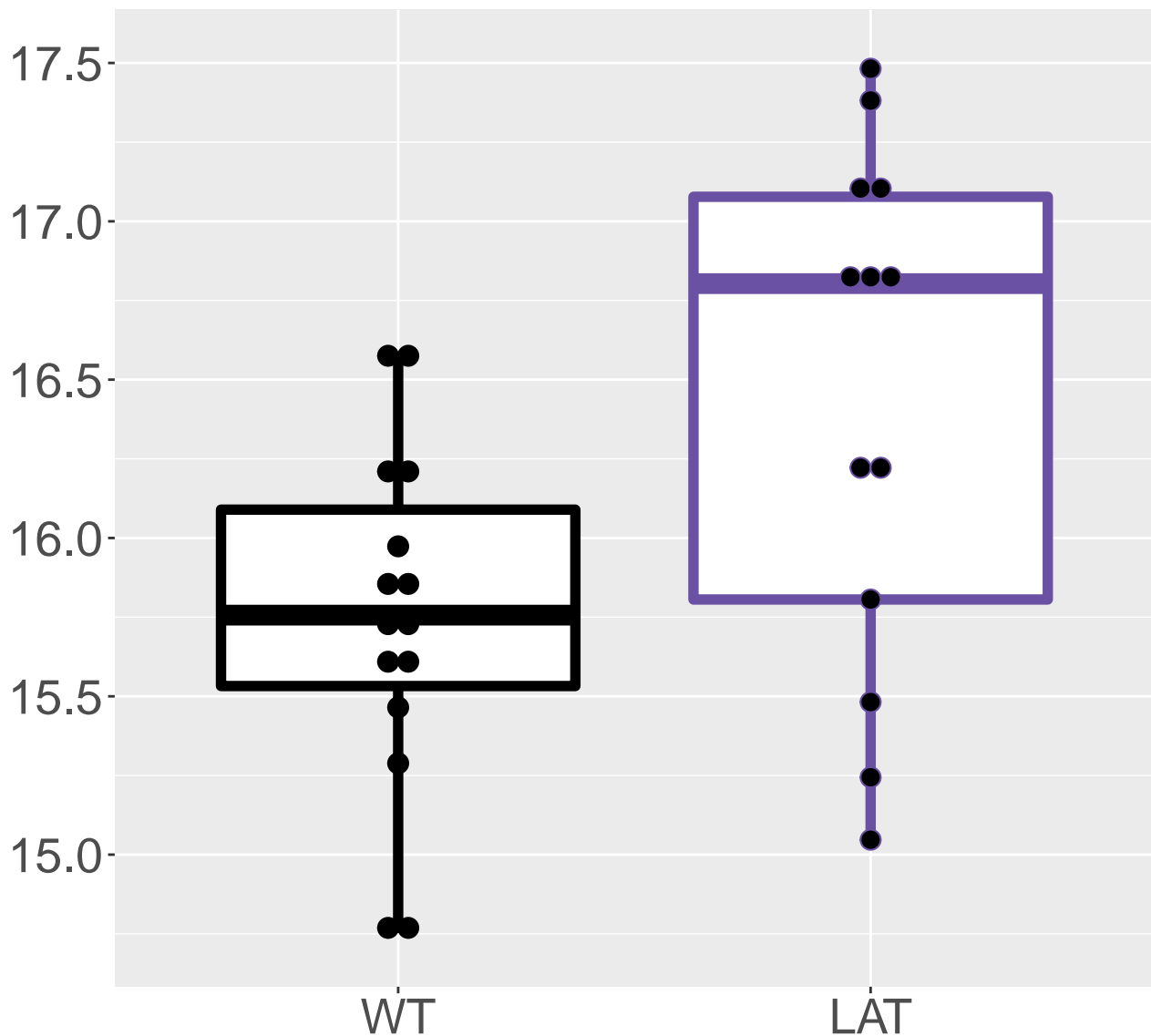
**FDR = 0.044, FC = -0.74**



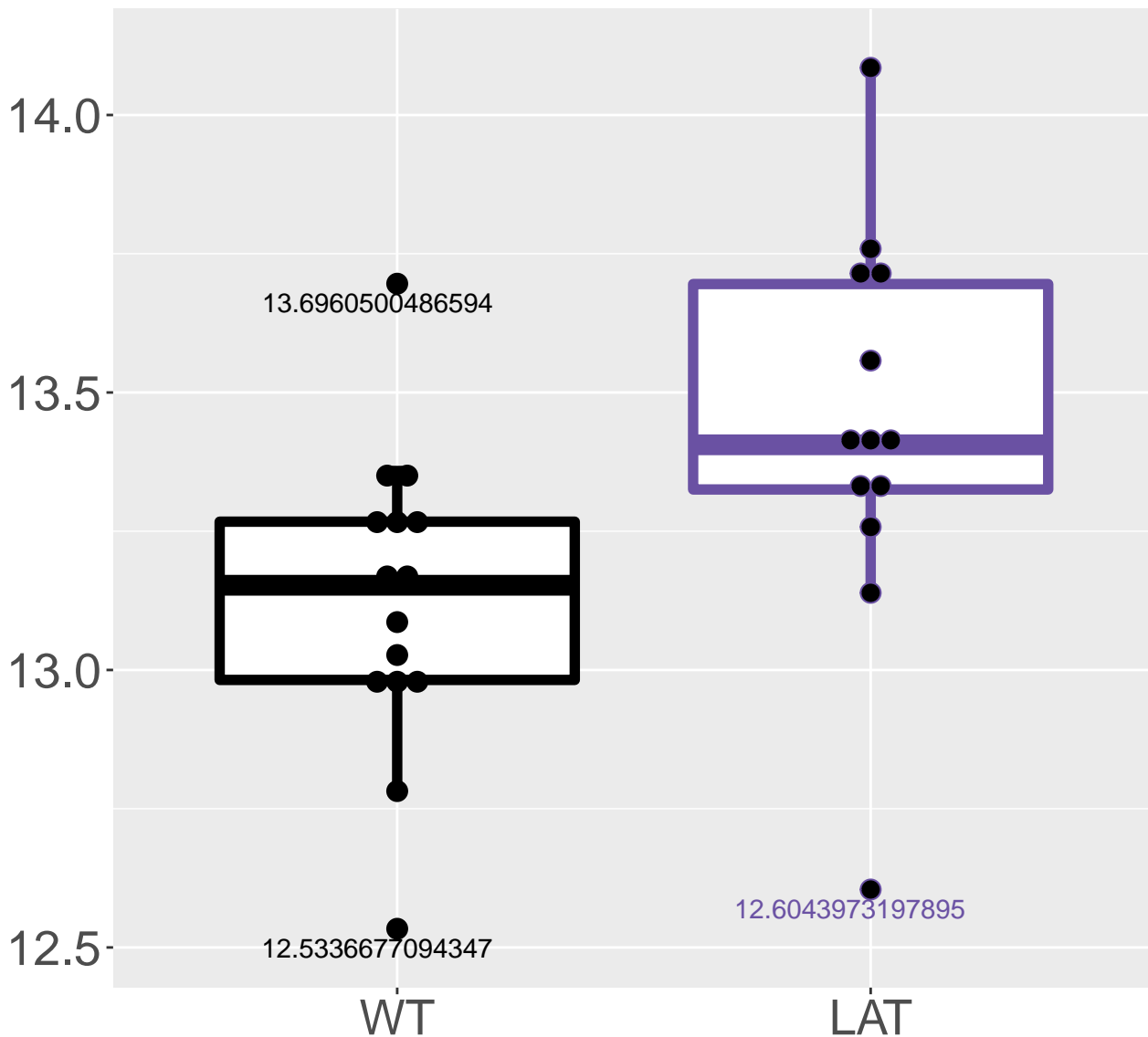
**FDR = 0.045, FC = 0.59**



**Dihydrouracil|1-Methylhydantoin;N-Methylhy**  
**FDR = 0.045, FC = 0.68**



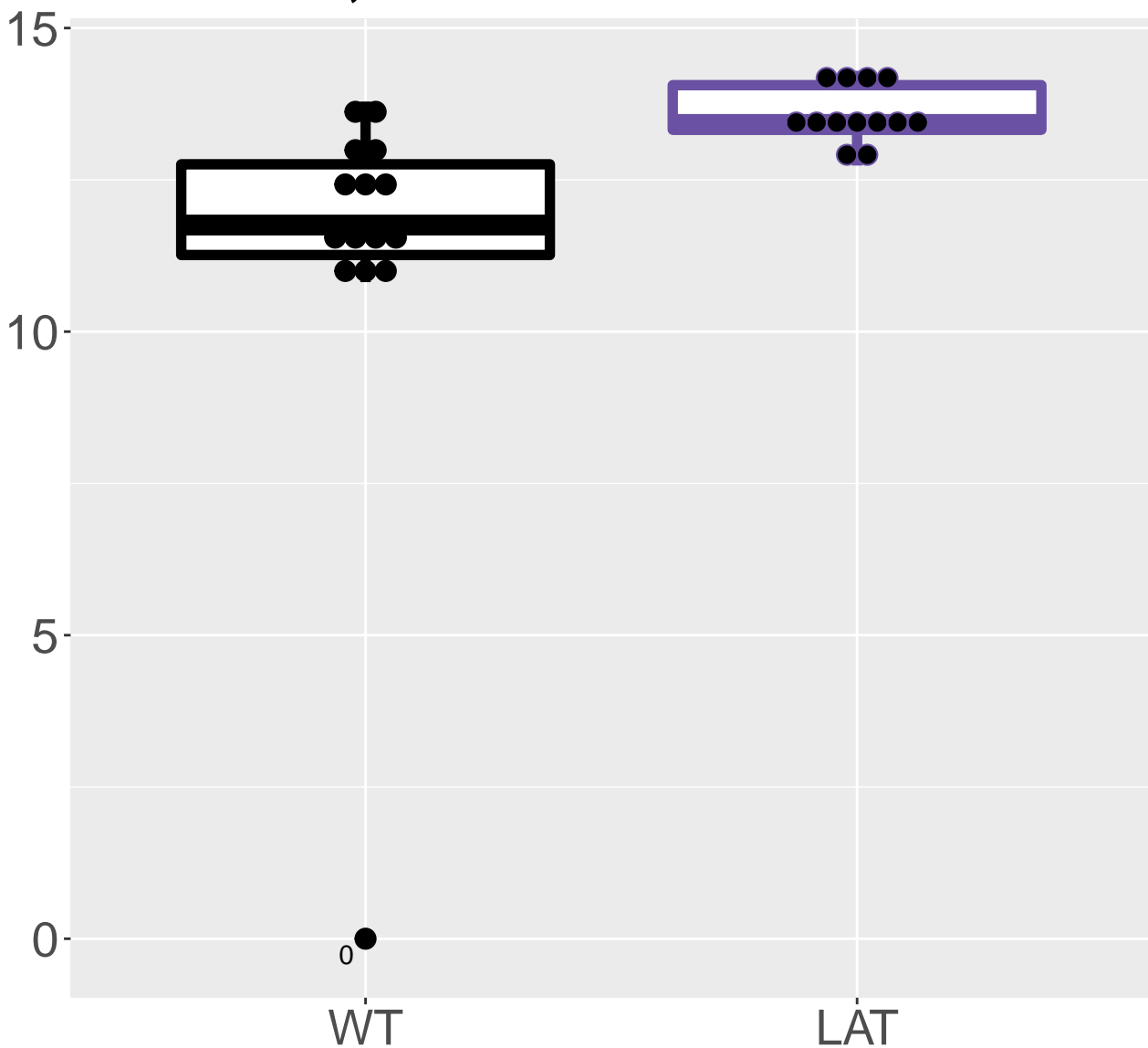
**M814.5535T1027**  
**FDR = 0.045, FC = 0.32**



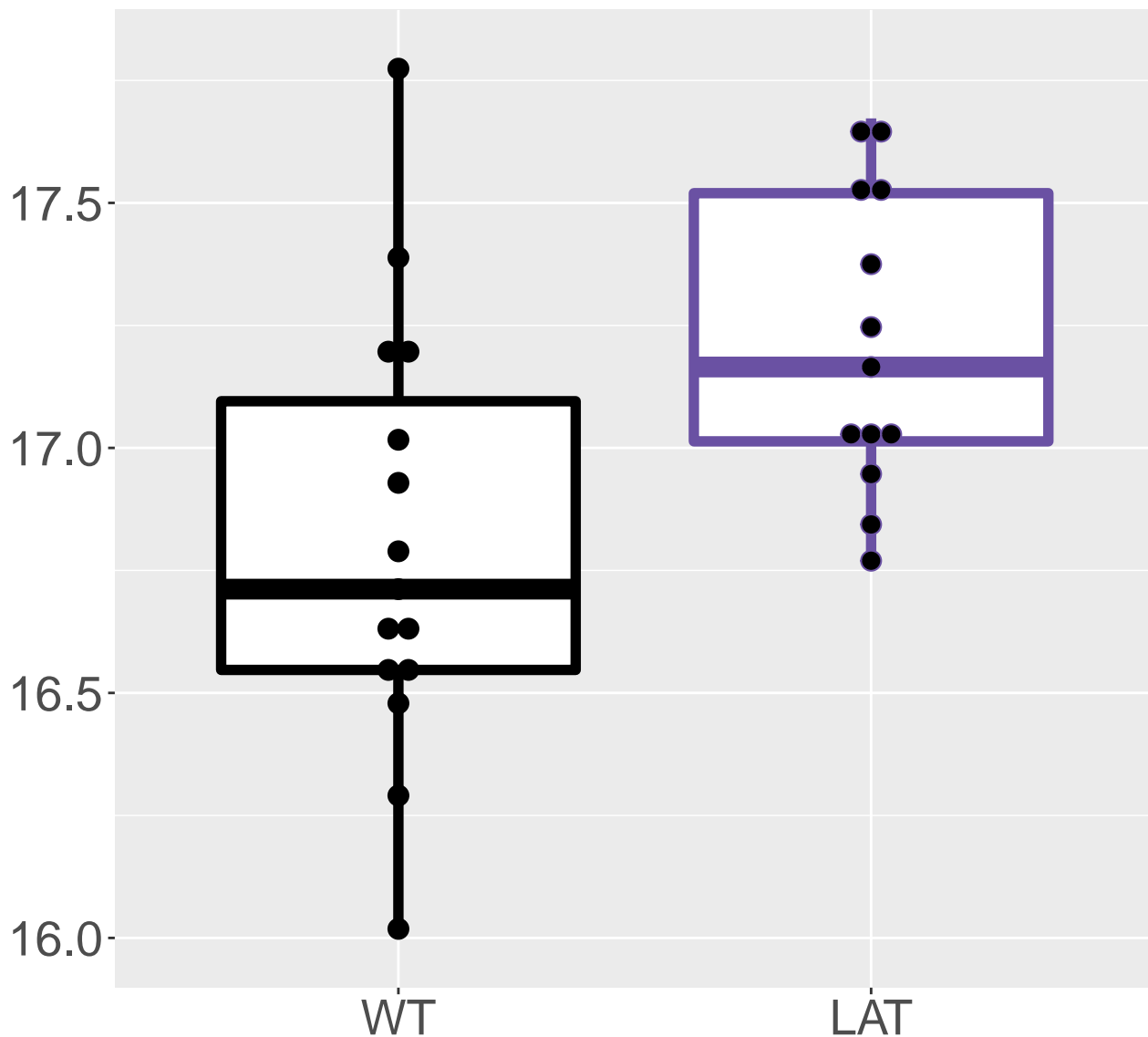


**M974.3493T667.48**

**FDR = 0.045, FC = 2.2**

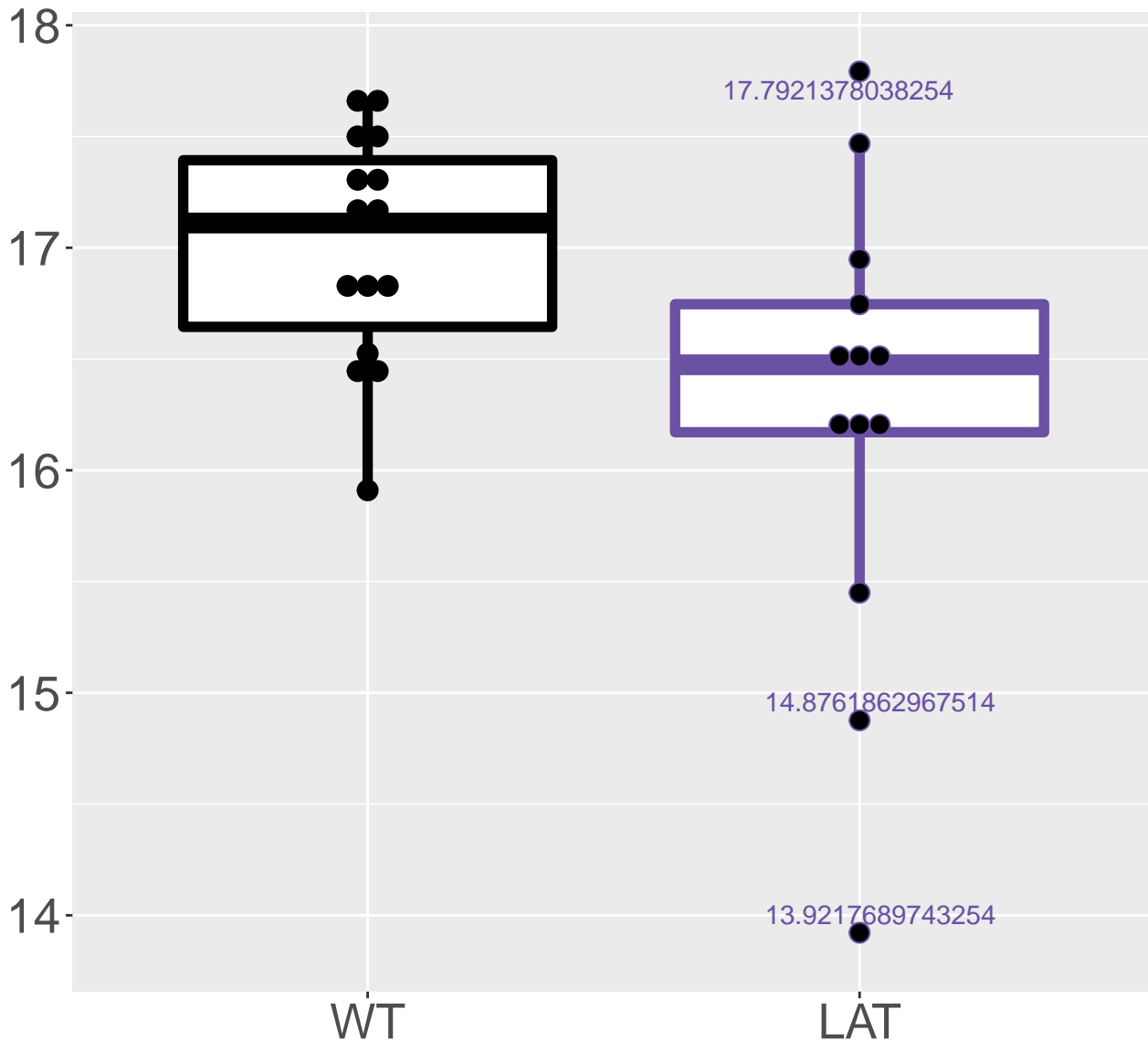


**M362.1032T400.92**  
**FDR = 0.046, FC = 0.4**

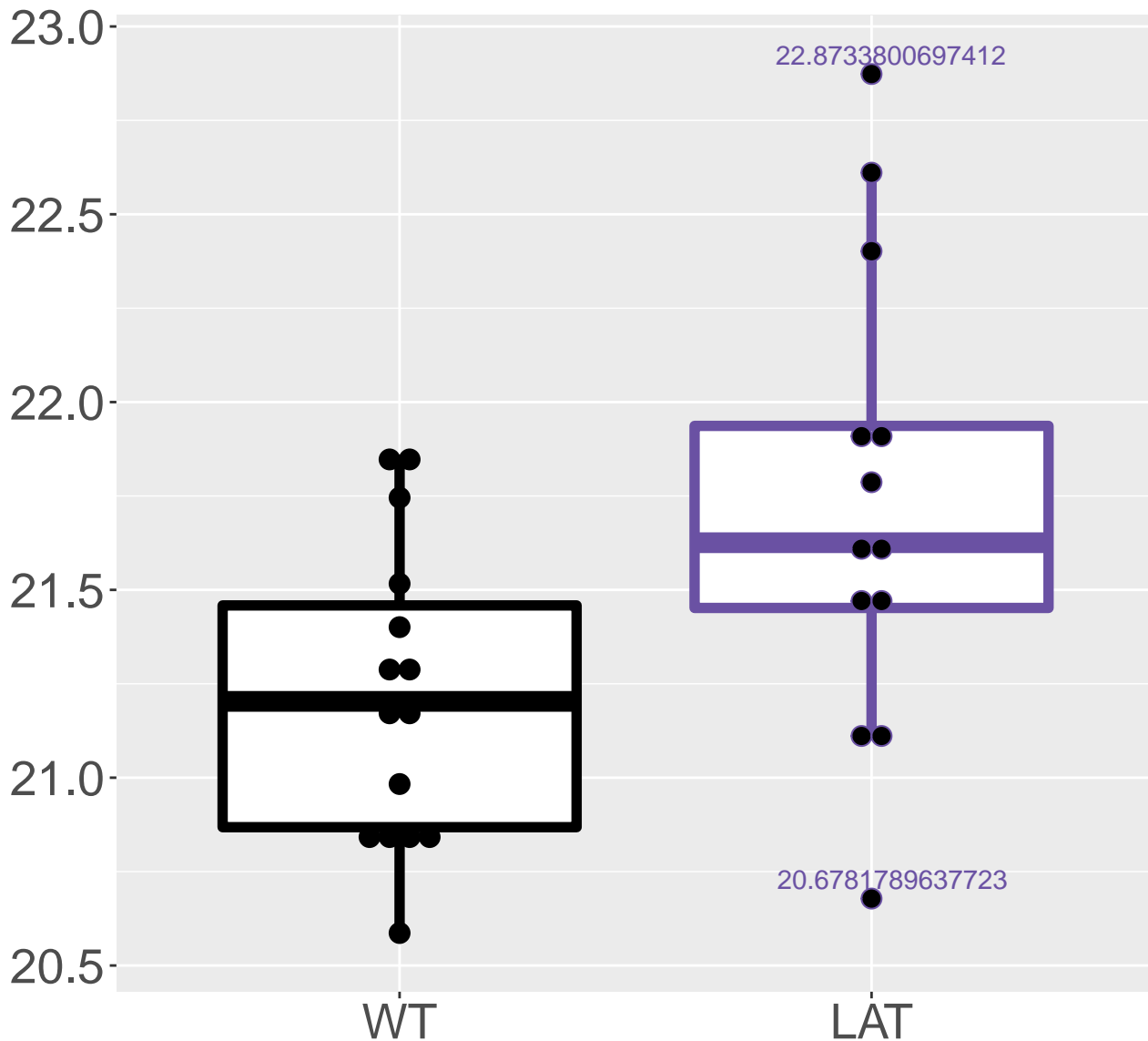


**M389.1306T443.6**

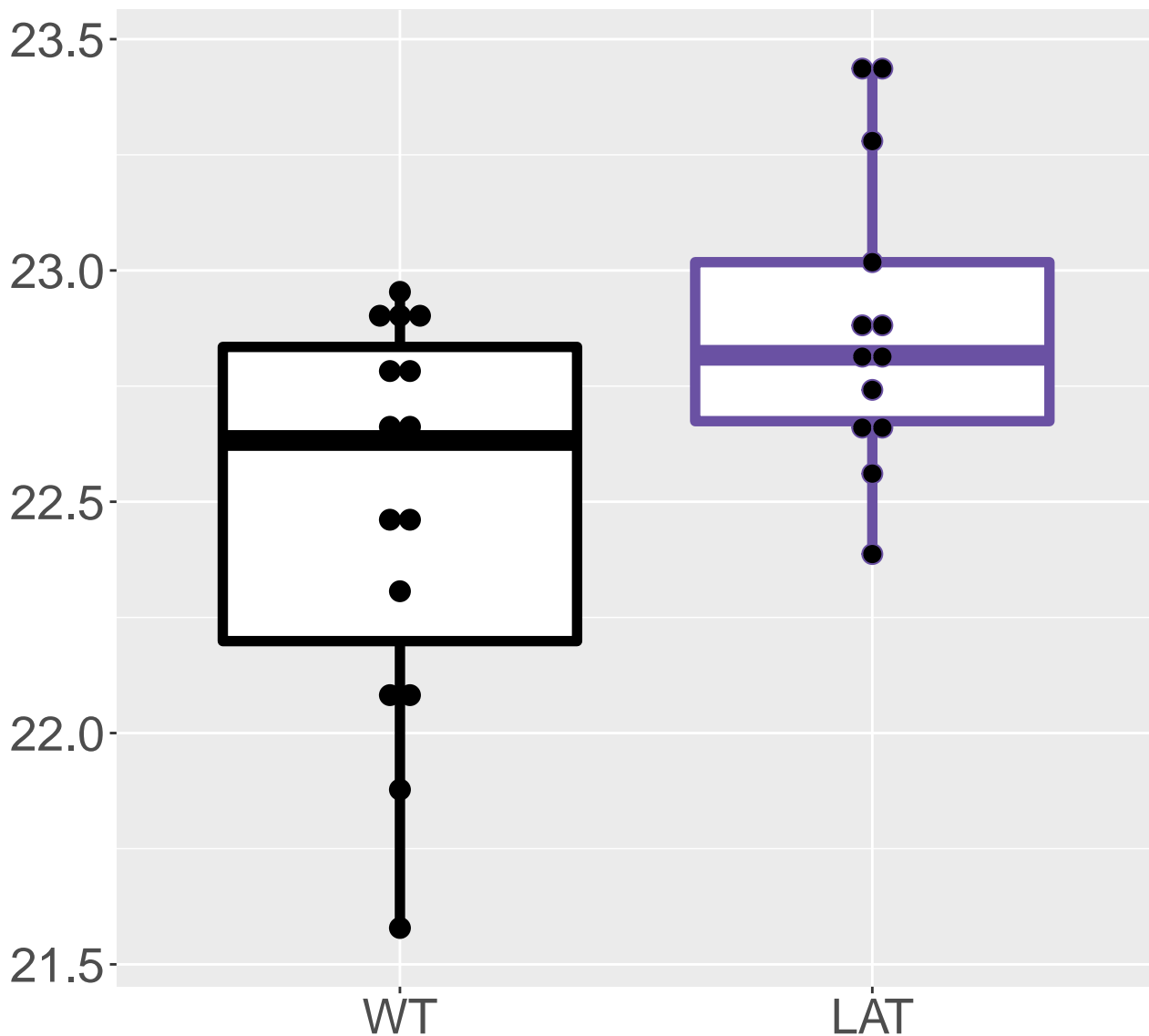
**FDR = 0.046, FC = -0.75**



**M112.9857T98.37\_1**  
**FDR = 0.047, FC = 0.52**

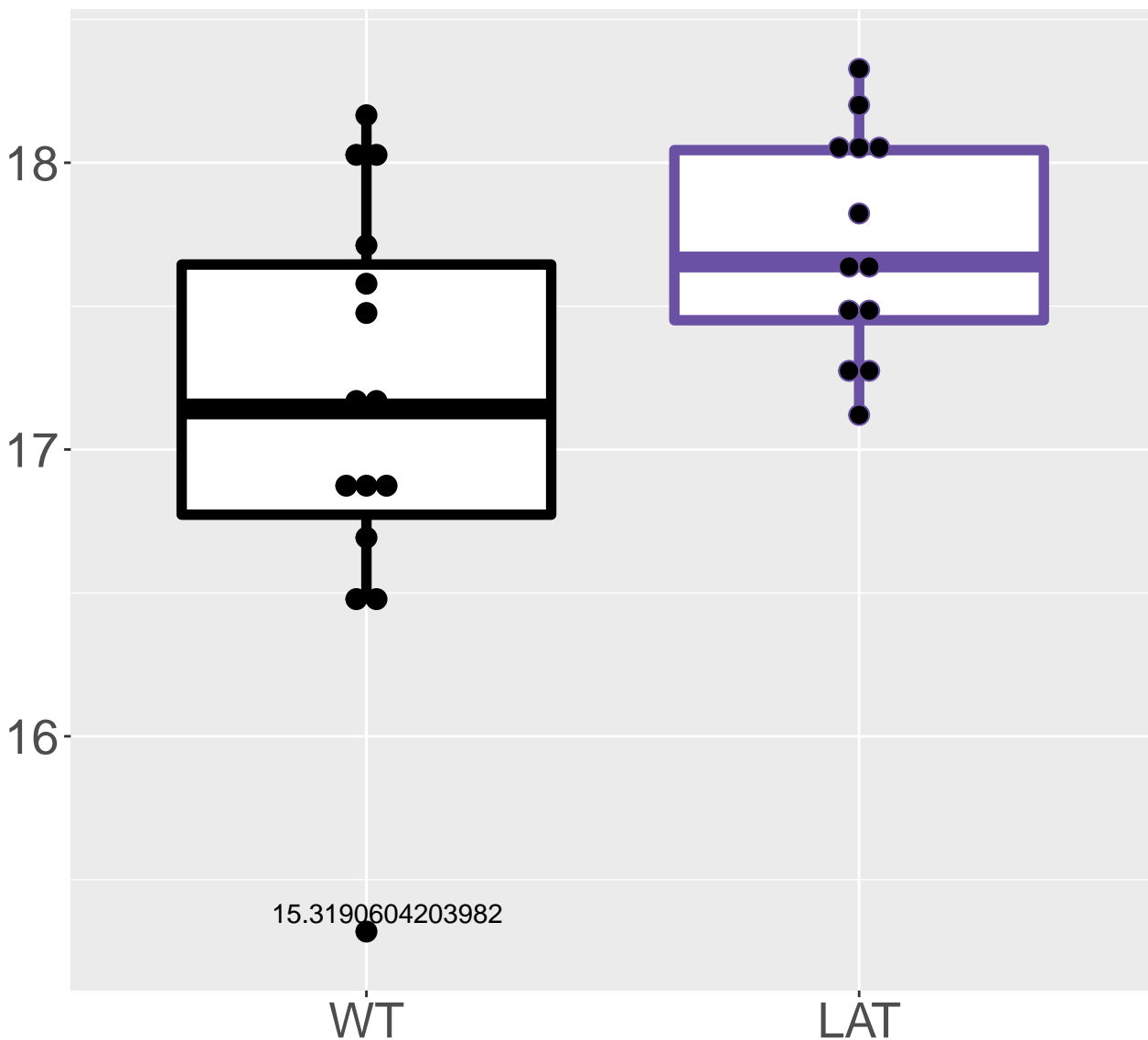


**M310.1261T476.1**  
**FDR = 0.047, FC = 0.4**



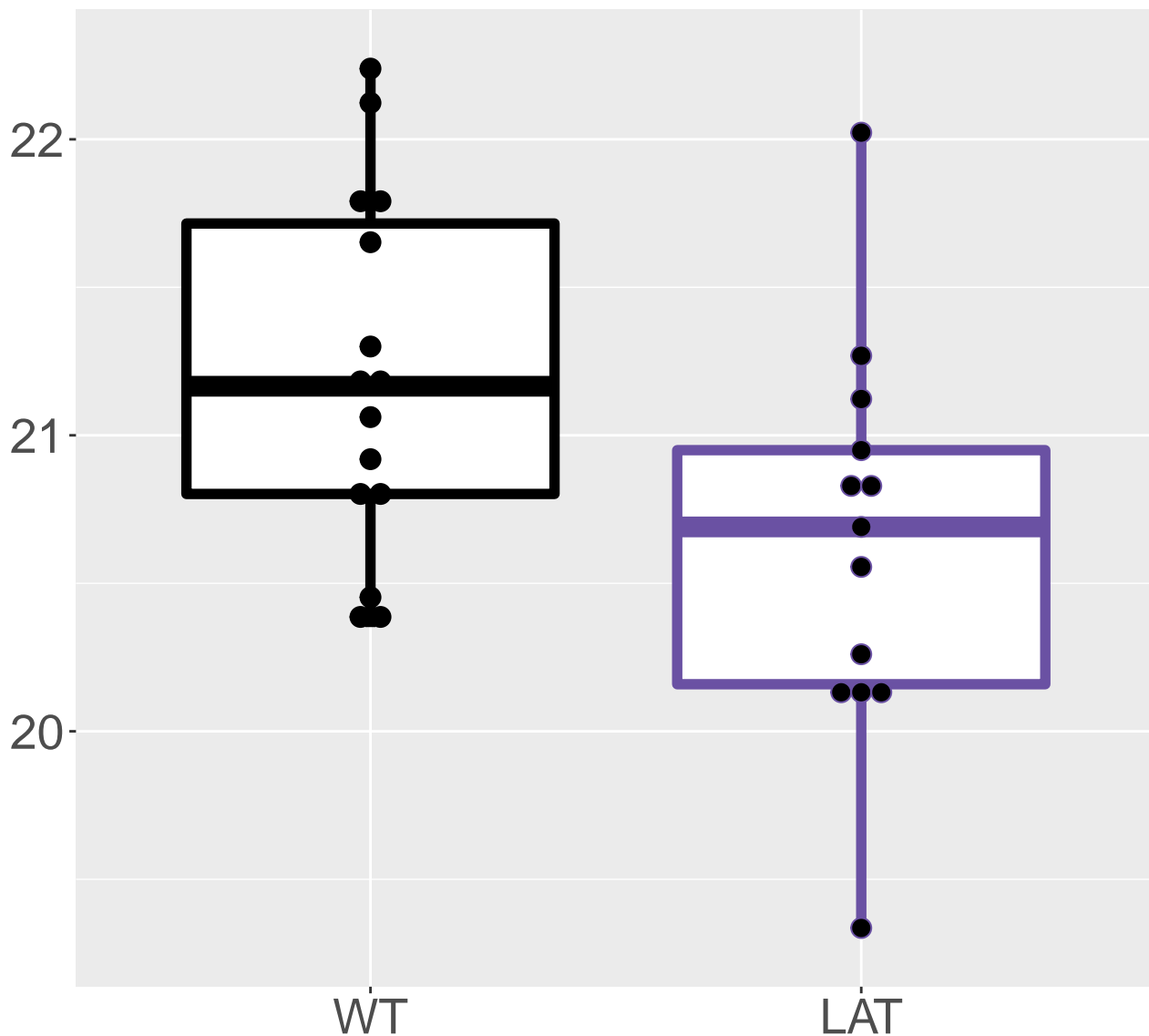
**M458.1801T503.2**

**FDR = 0.048, FC = 0.6**



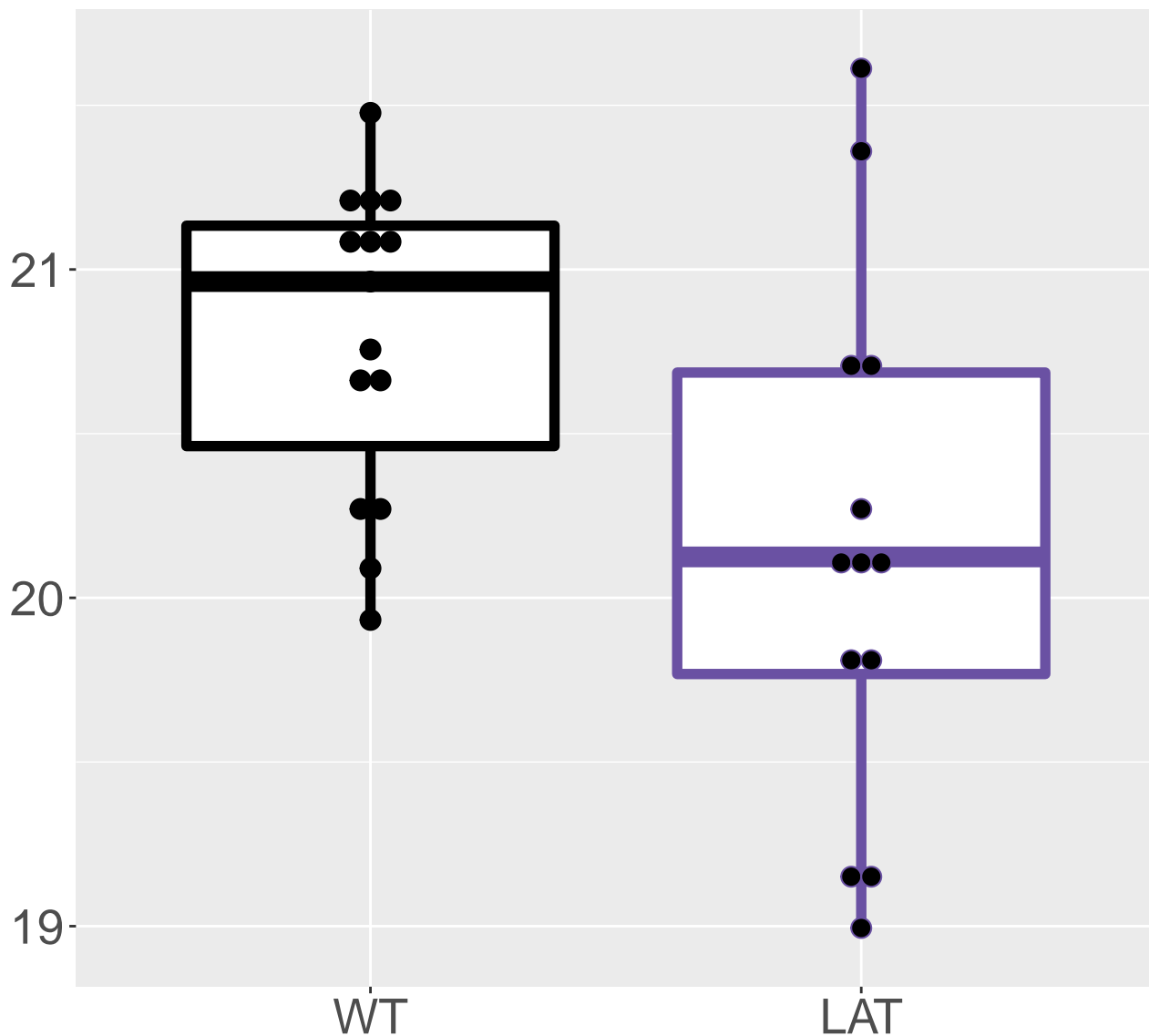
**M537.4896T78.16**

**FDR = 0.048, FC = -0.57**



**M429.1268T476.27**

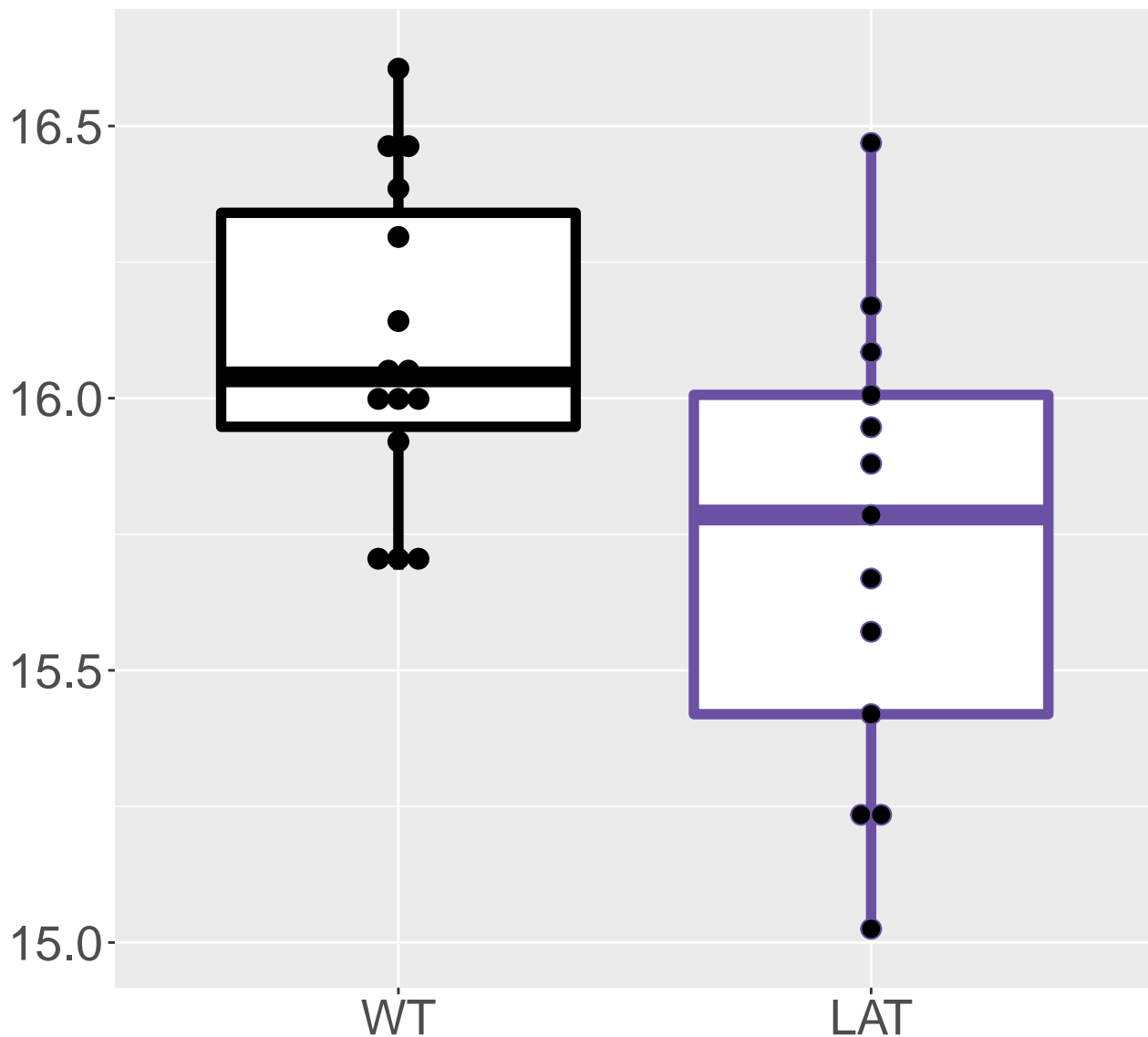
**FDR = 0.048, FC = -0.65**





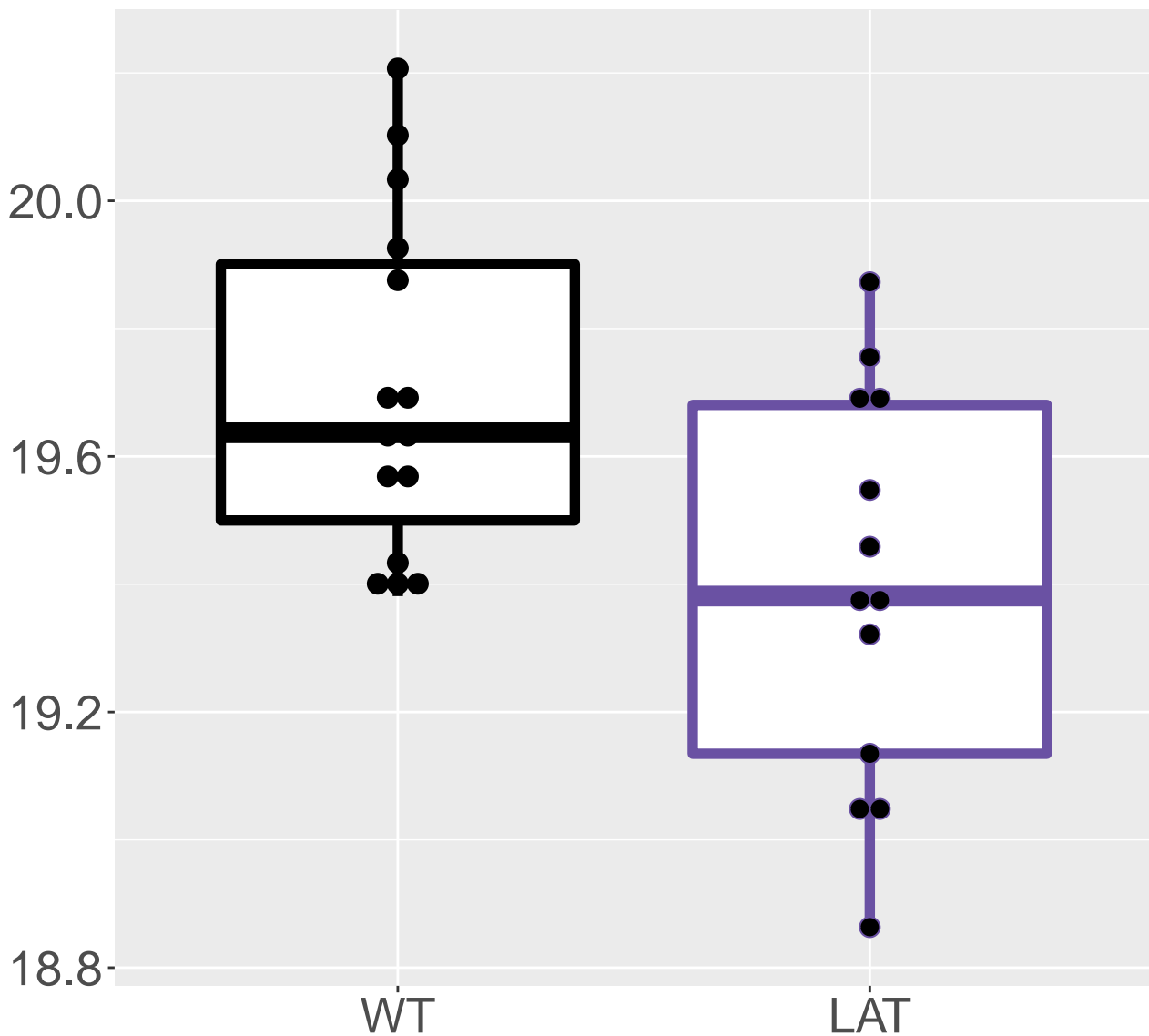
**M302.0814T421.04**

**FDR = 0.048, FC = -0.37**

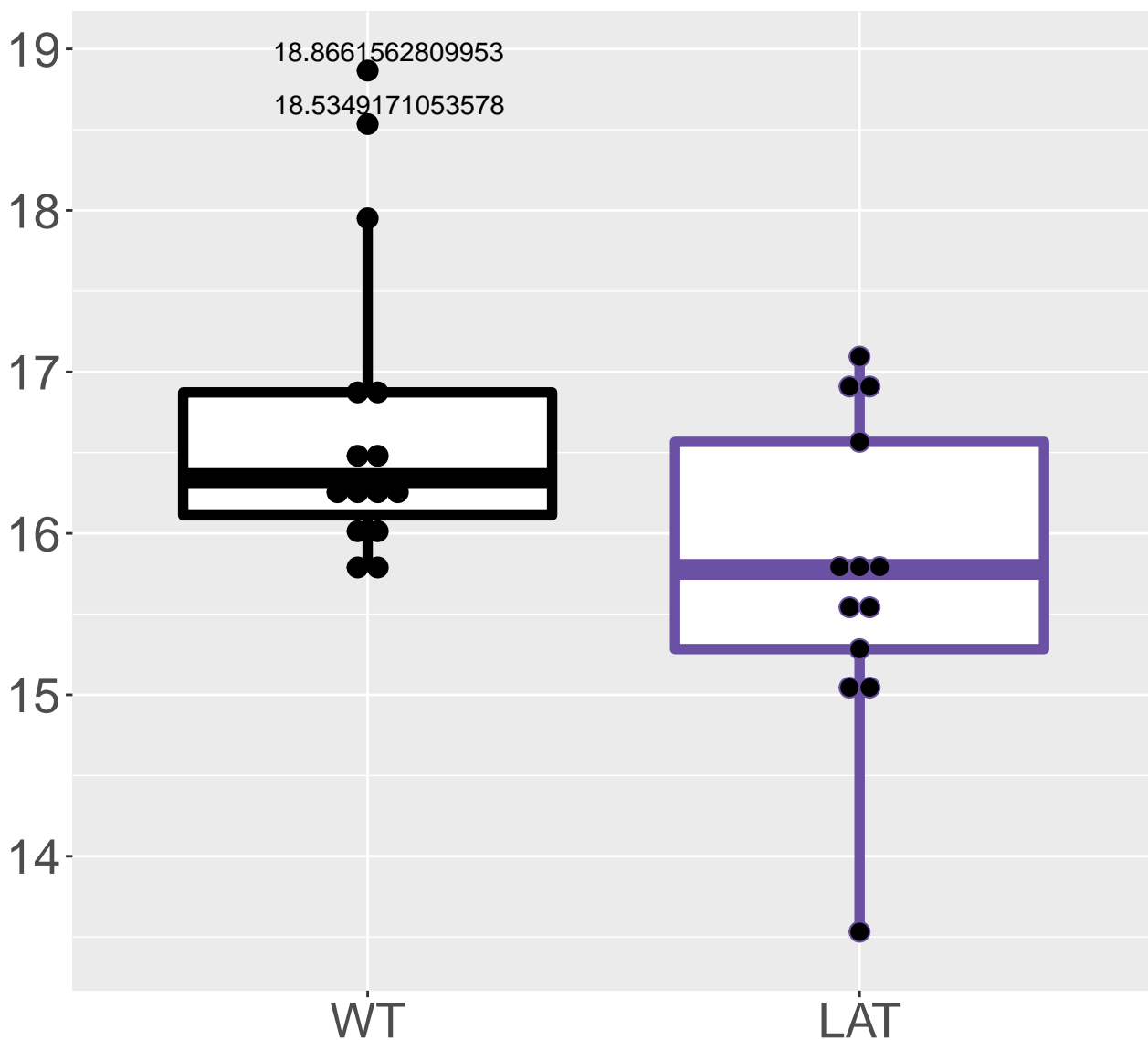


**M301.078T421.12**

**FDR = 0.048, FC = -0.31**

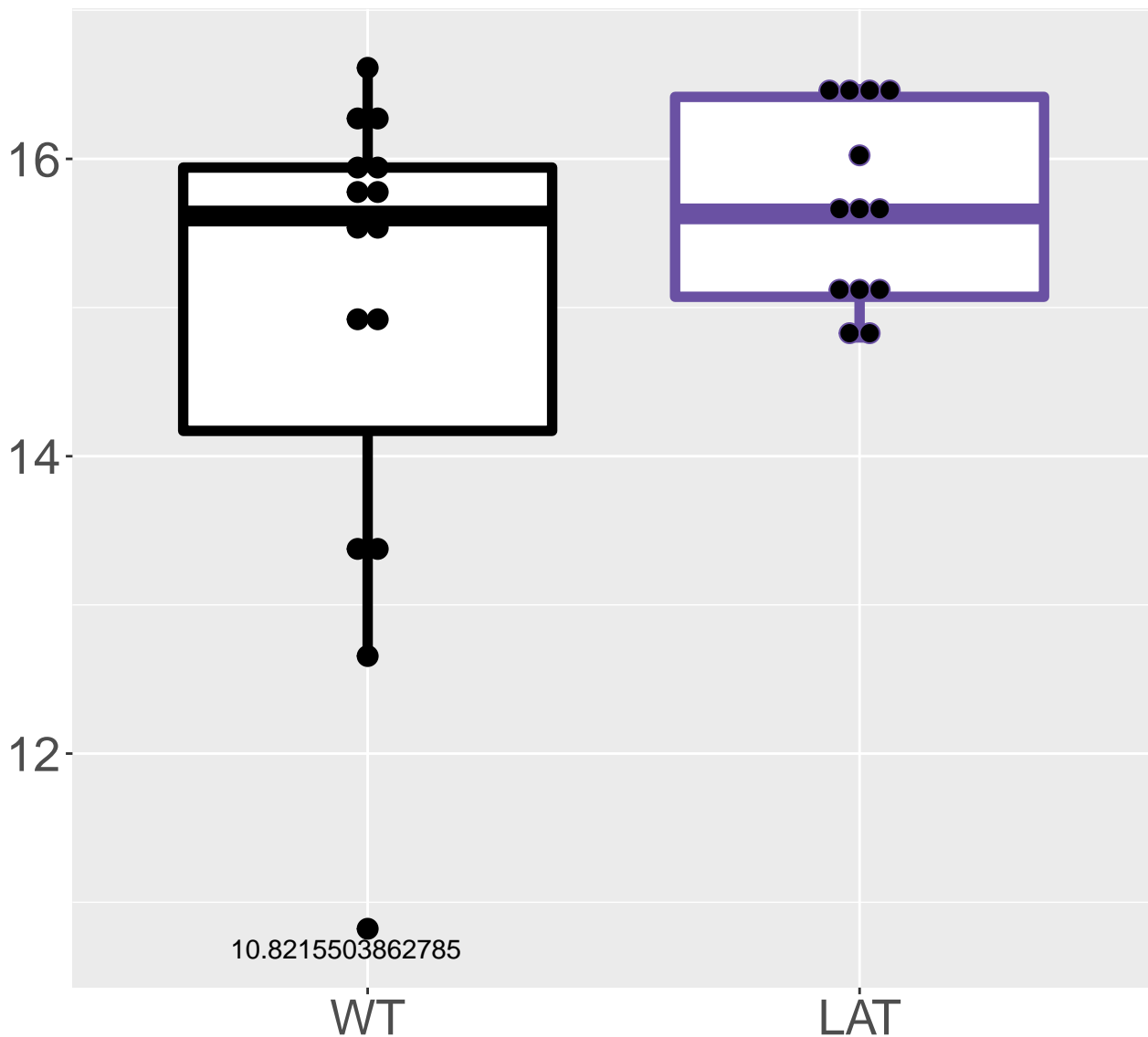


**M172.0615T263.1**  
**FDR = 0.048, FC = -0.95**



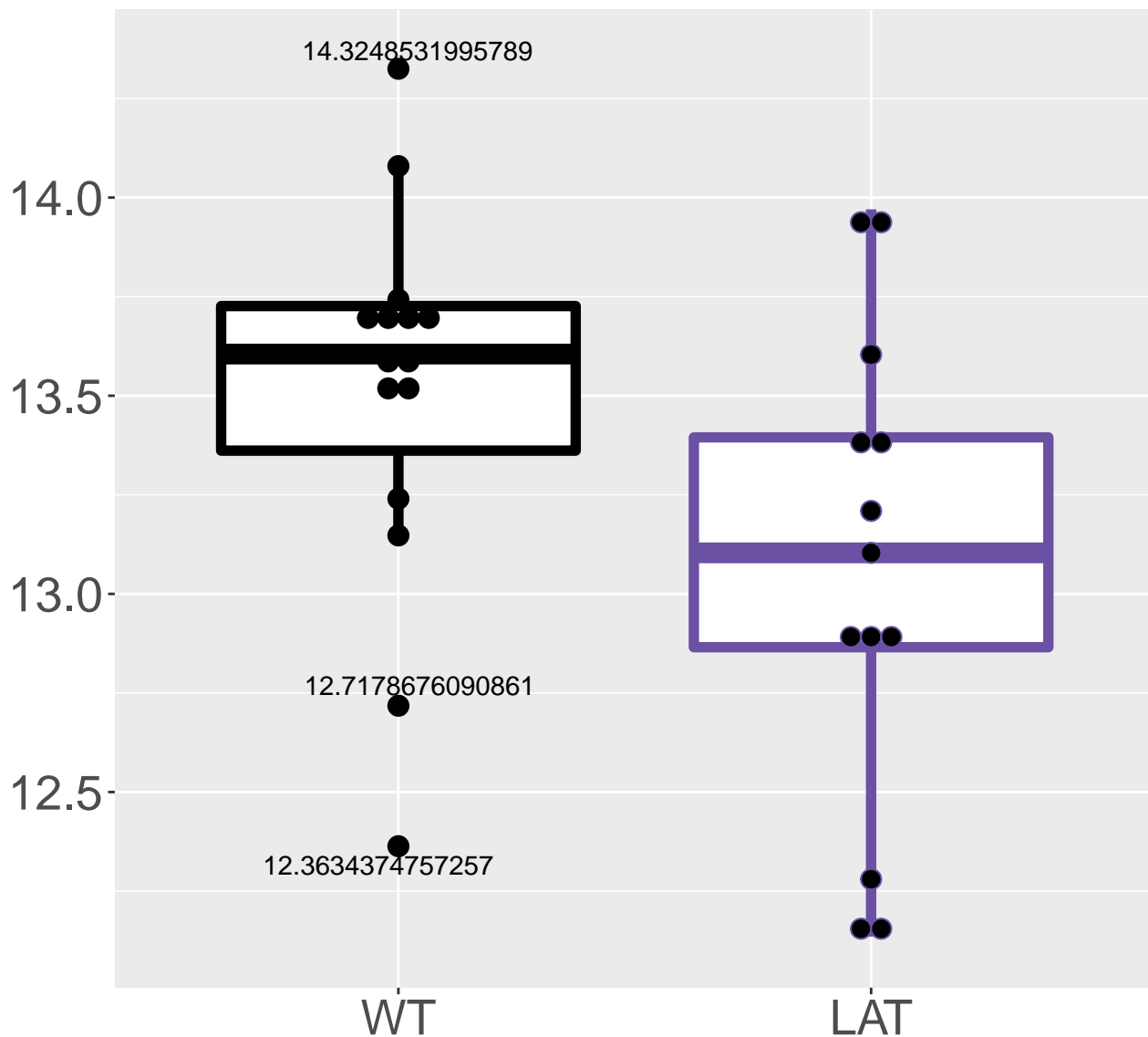
**M159.1139T575**

**FDR = 0.048, FC = 0.76, sex\*\*\***



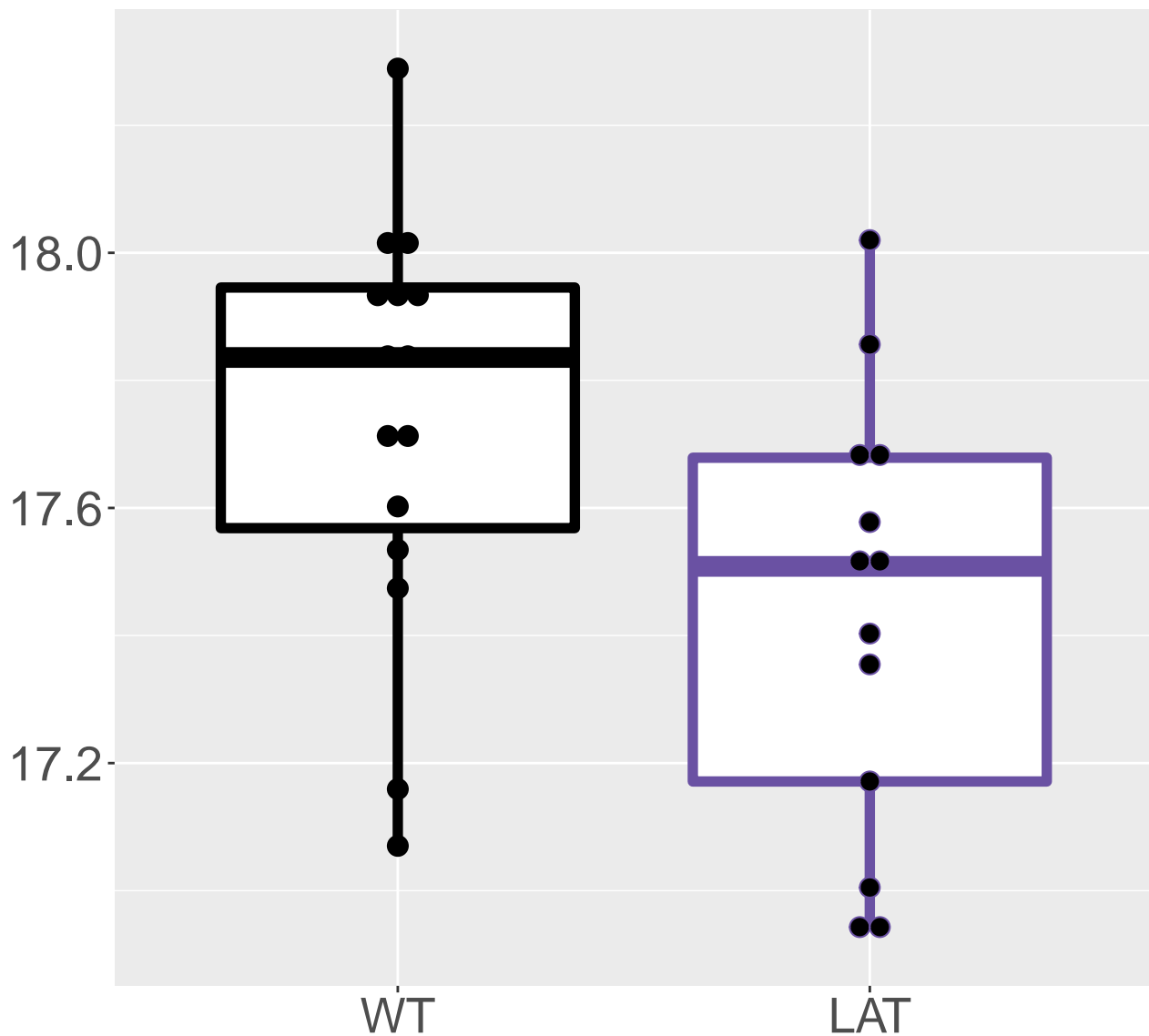
**M402.1165T623.61**

**FDR = 0.048, FC = -0.45, sex\*\*\***



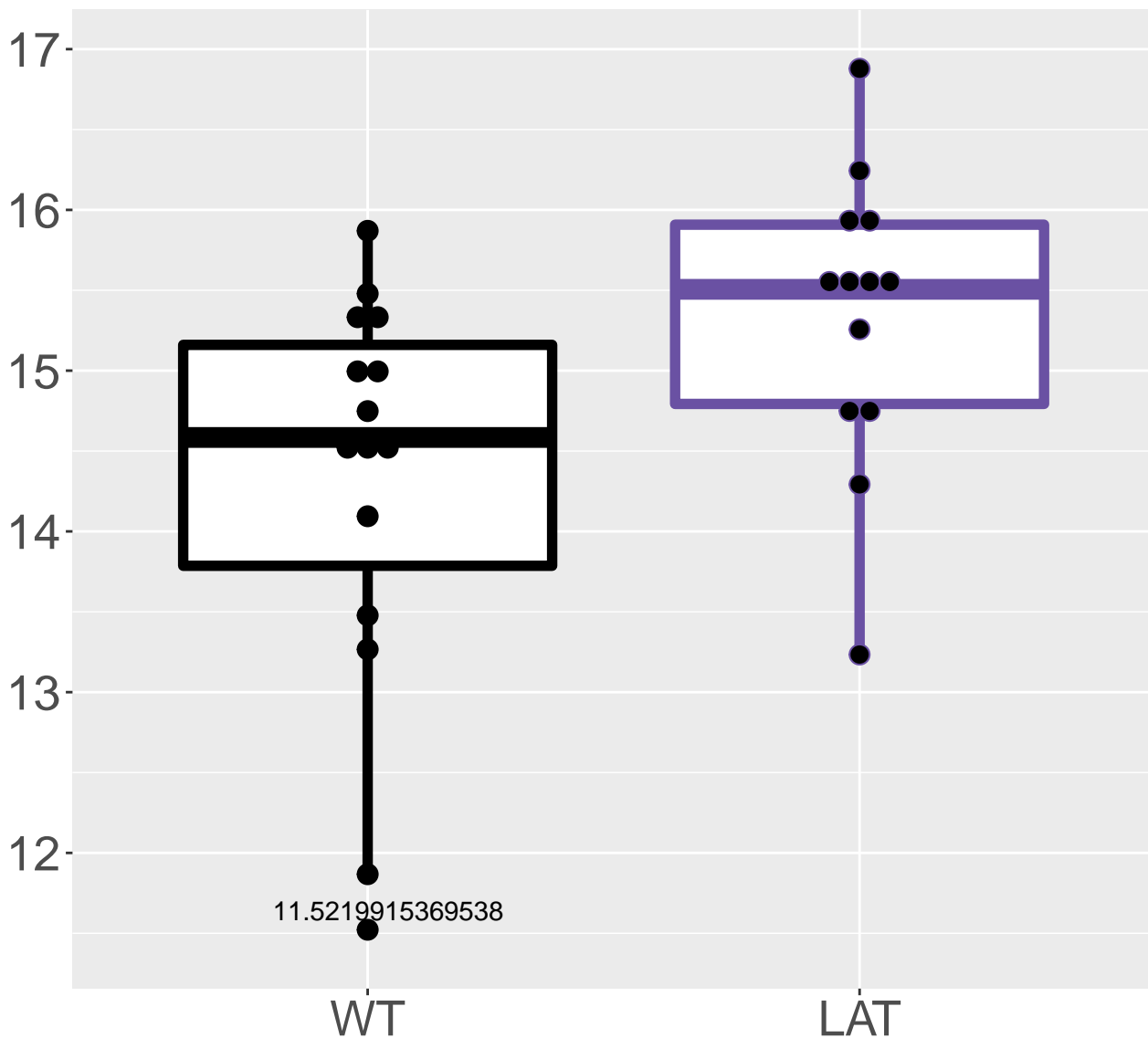
**M325.2391T78.41**

**FDR = 0.049, FC = -0.3**



**M257.1397T90.47\_1**

**FDR = 0.05, FC = 1**



**M530.2796T131.83**

**FDR = 0.05, FC = 0.91, sex\***

