

Supplementary Fig1

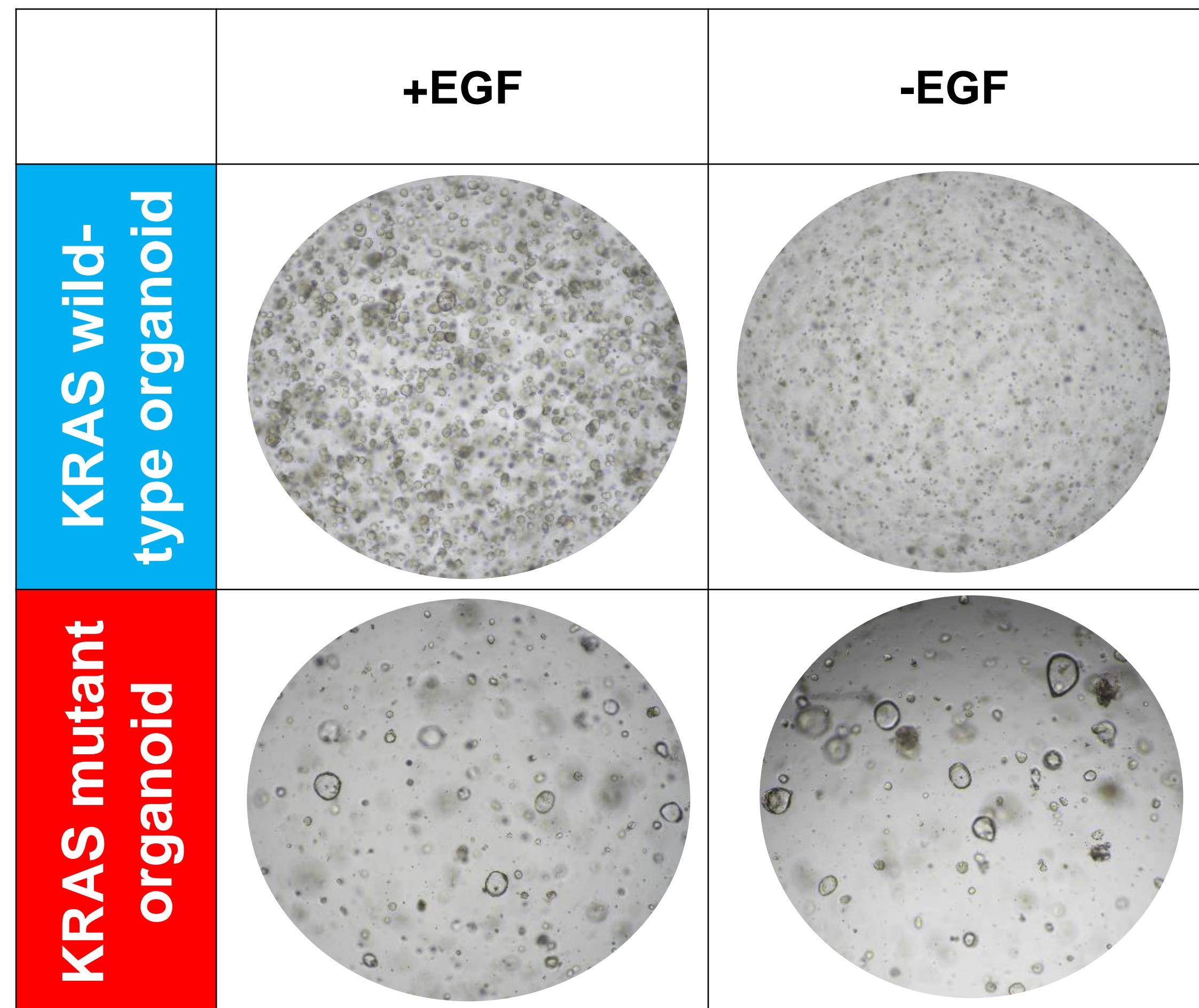
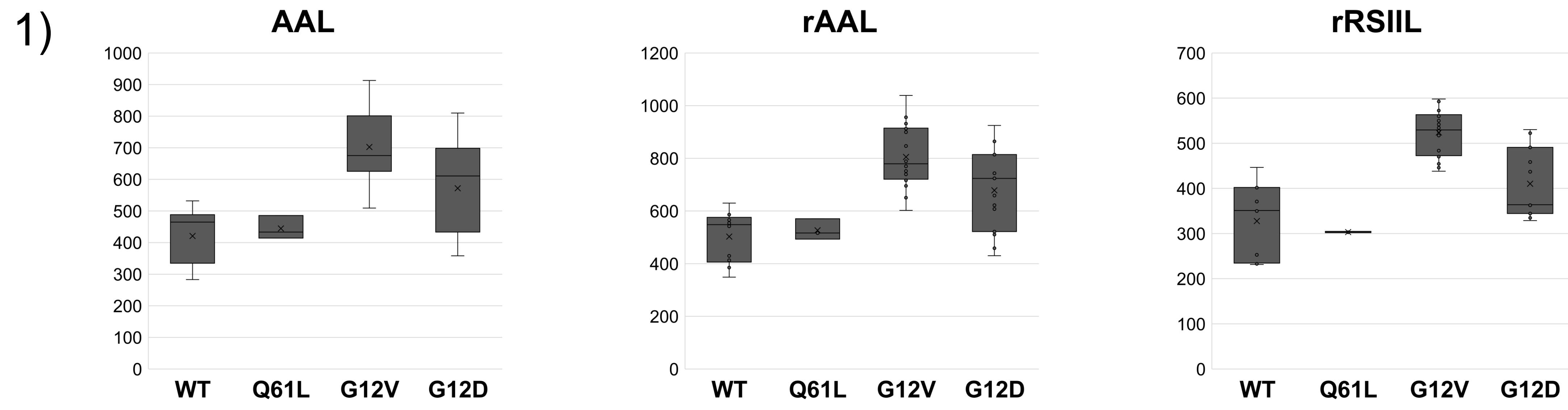


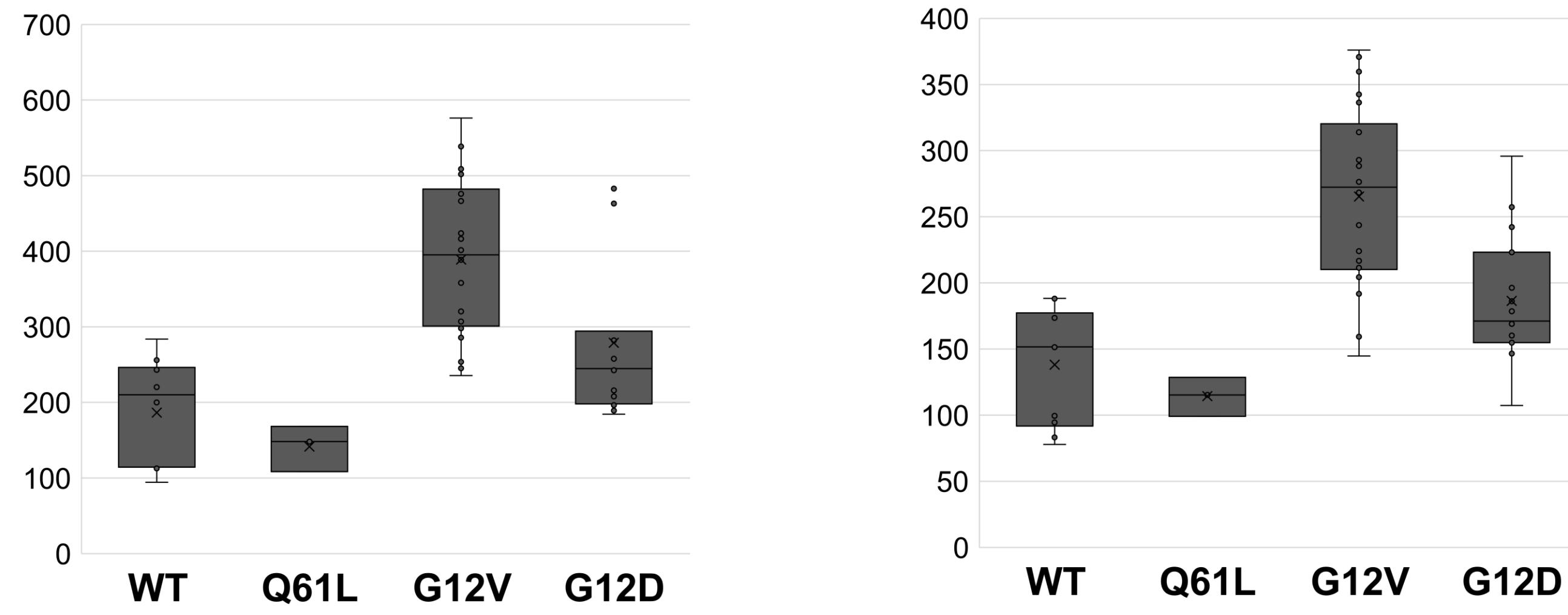
Figure S1: Brightfield images representative of organoid cultures (upper: KRAS wild-type, lower: KRAS mutant) in medium with EGF removed at day 5.

Supplementary Fig2

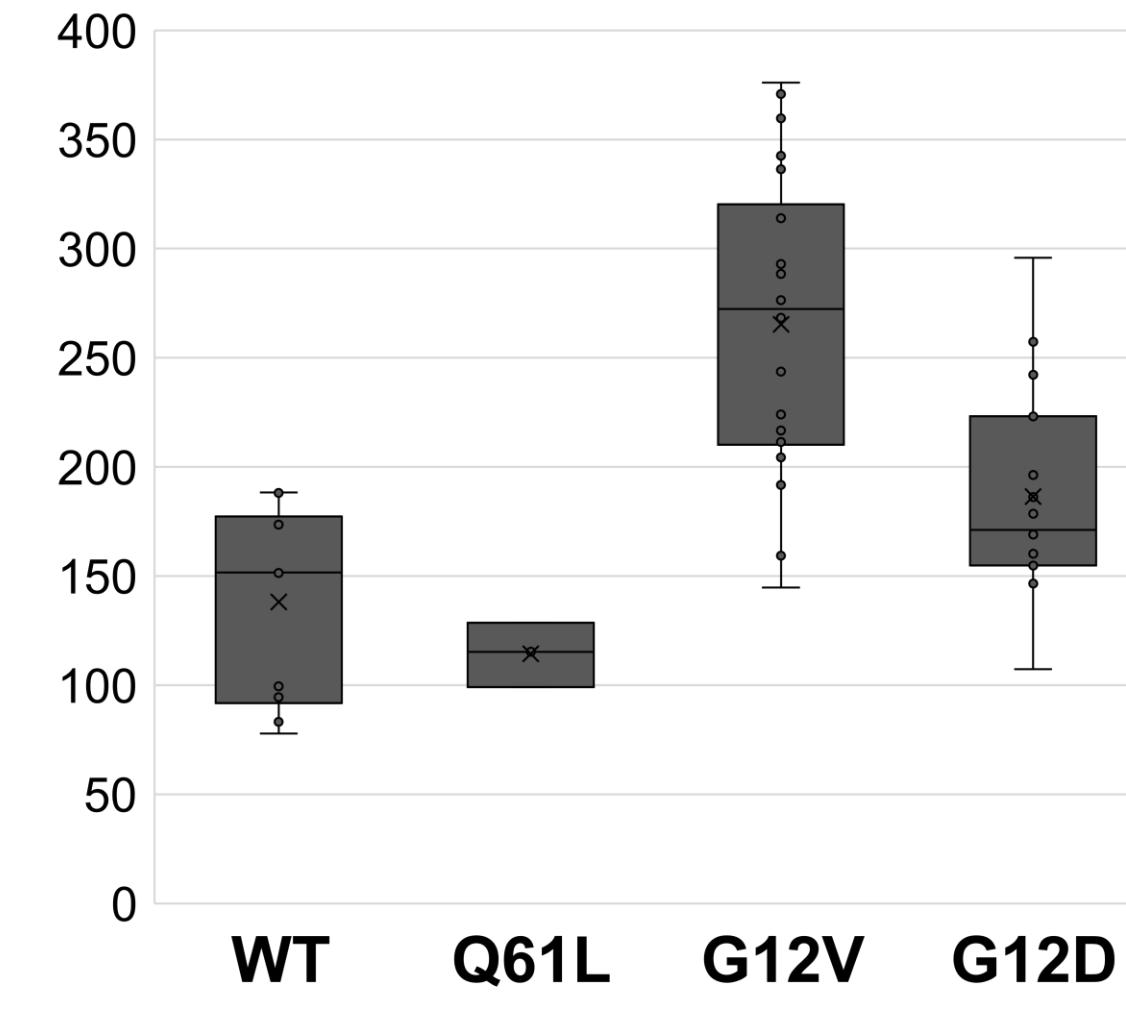
a Fucose binding Lectin



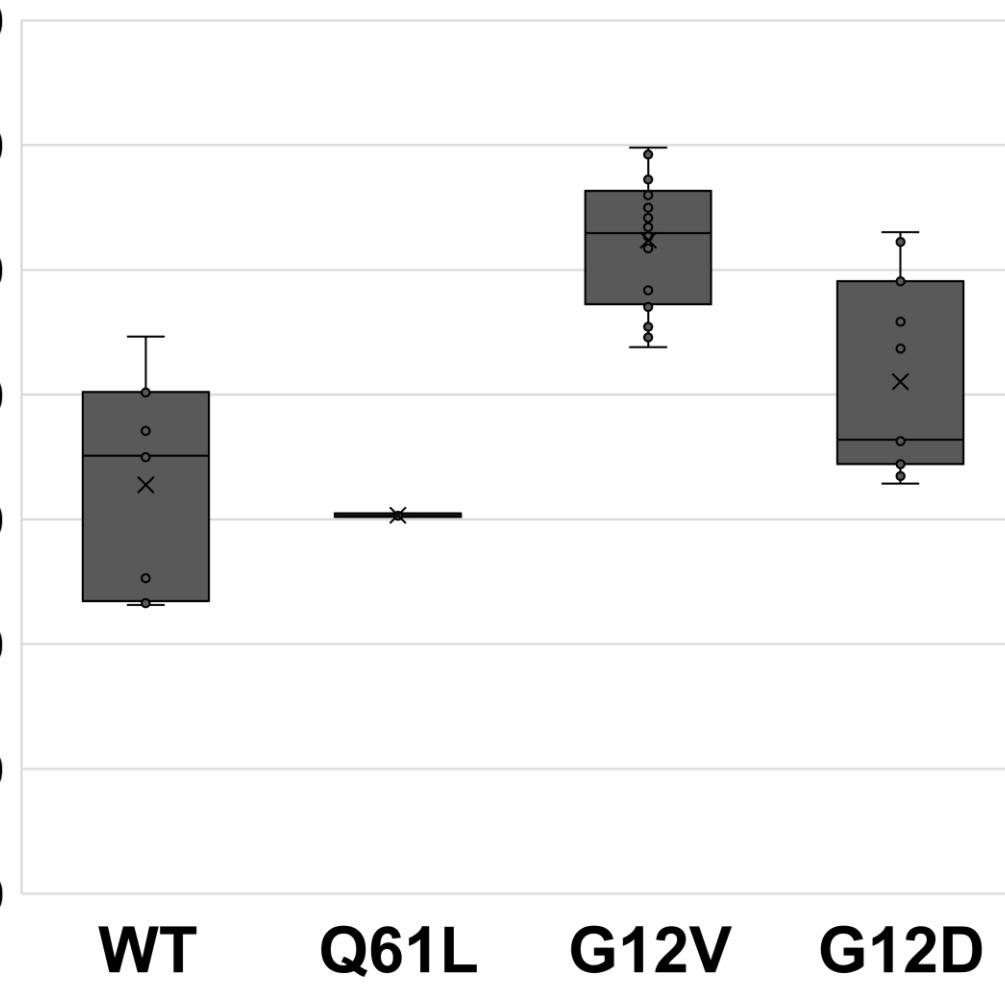
AOL



rAOL

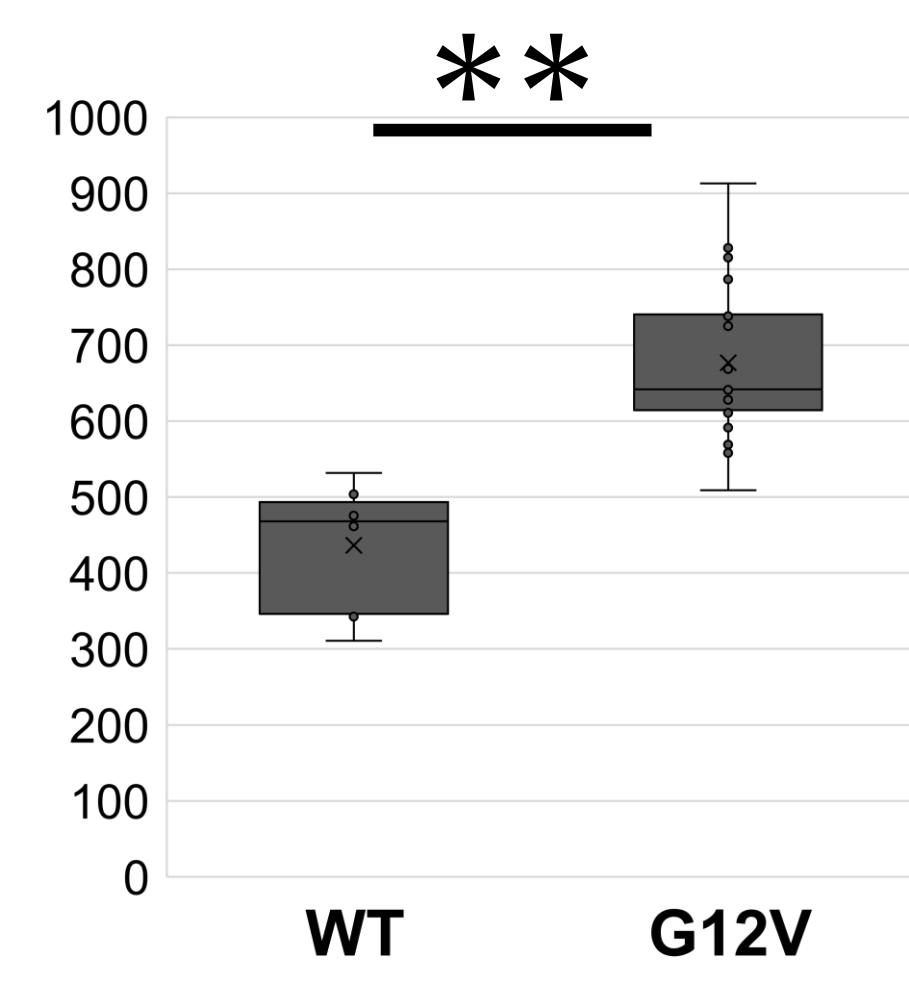


rRSIIL

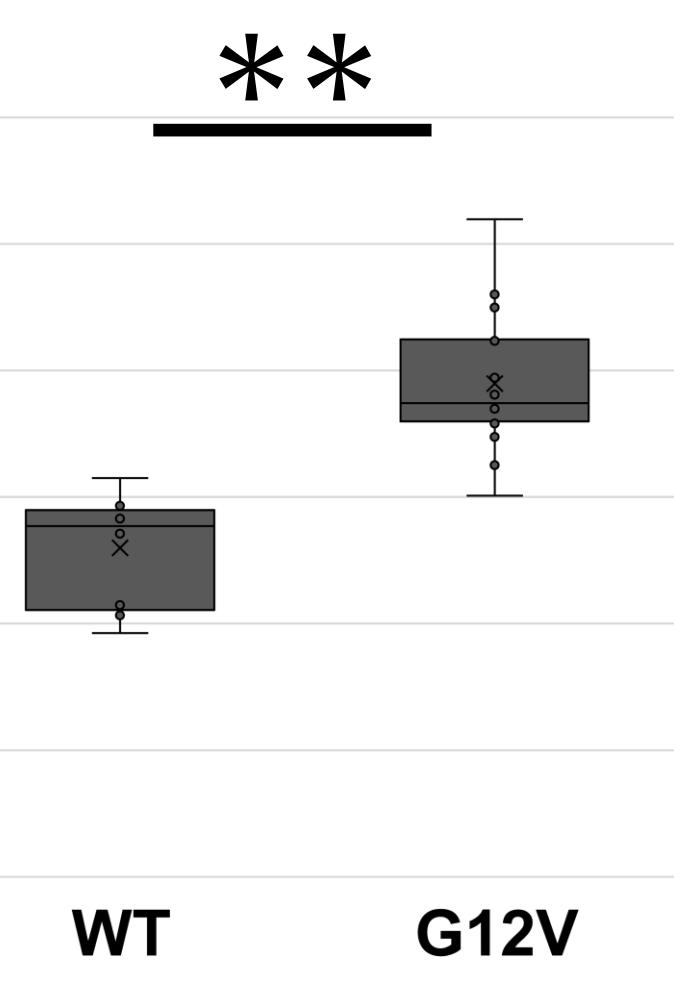


2)

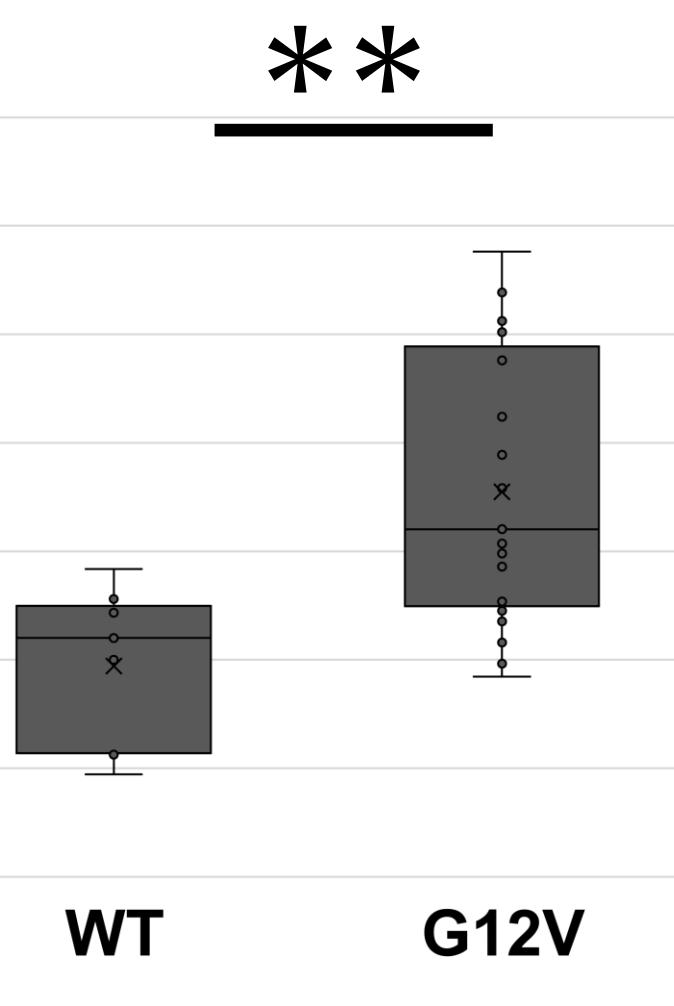
AAL



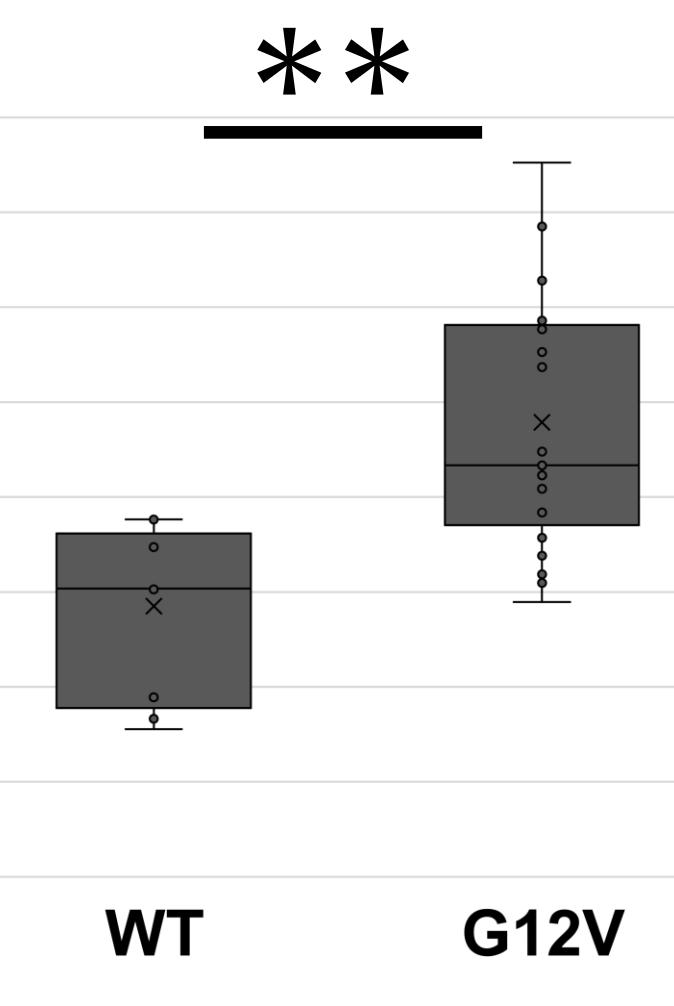
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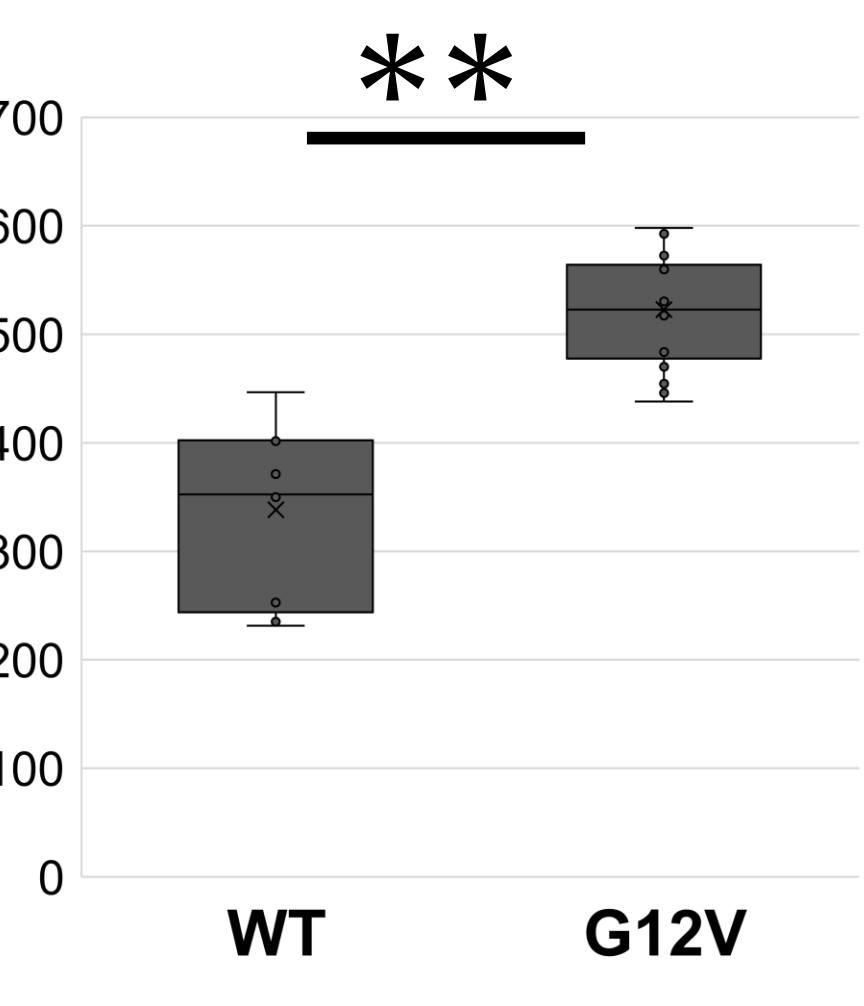
rAOL



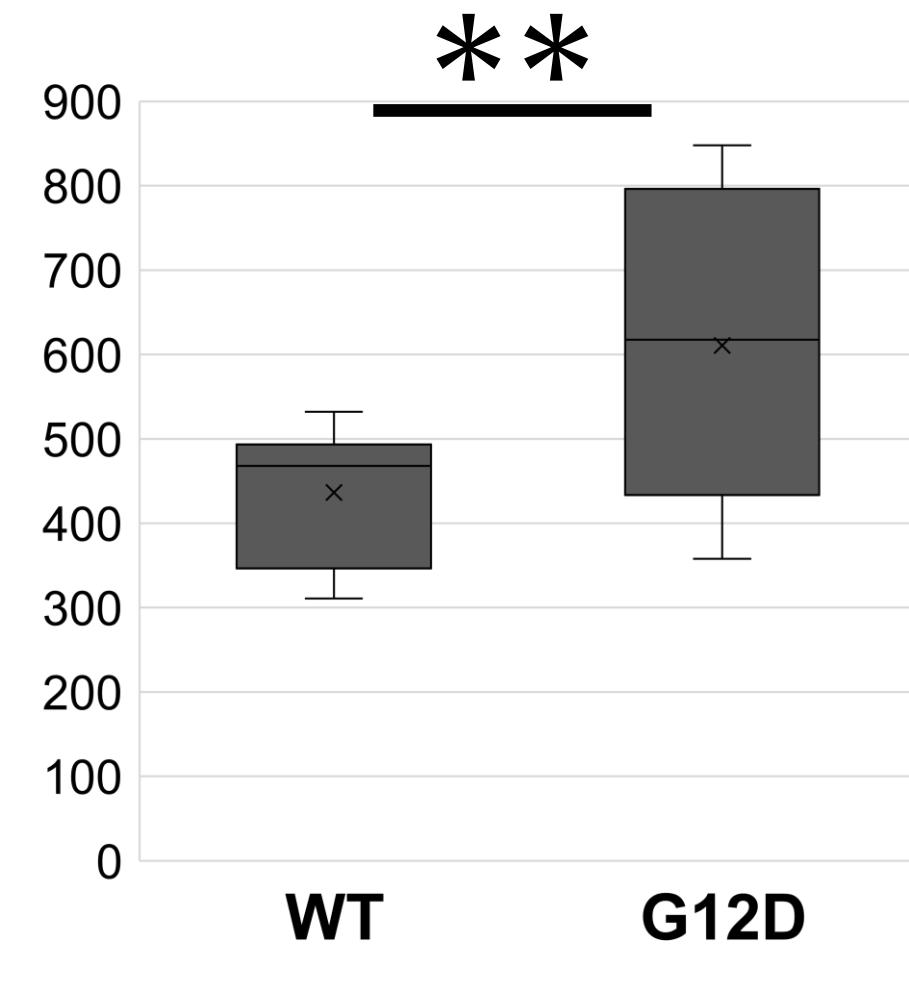
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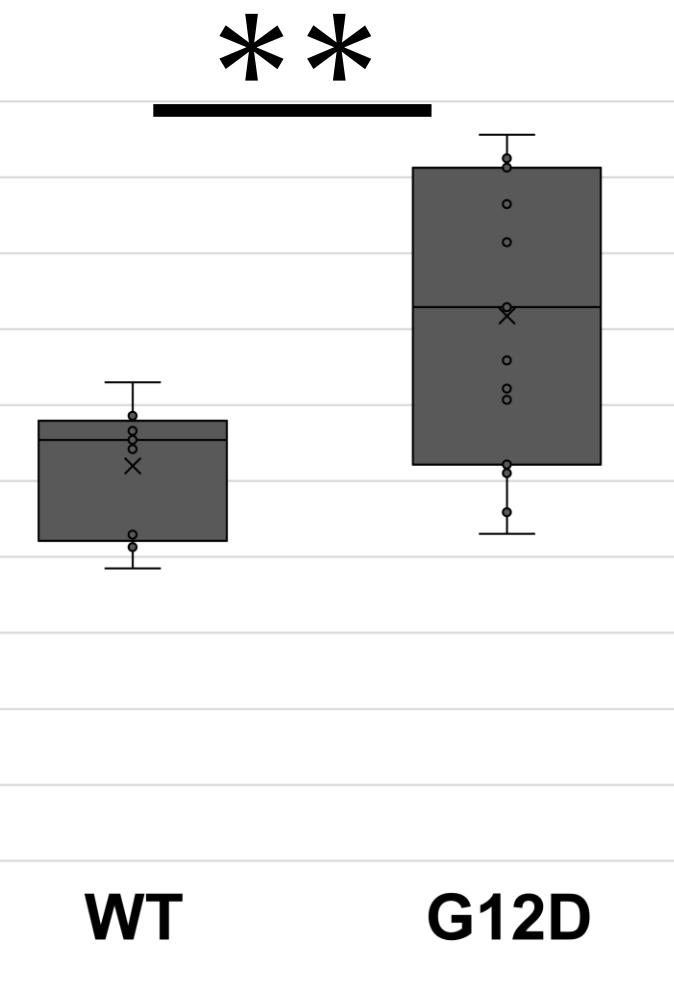
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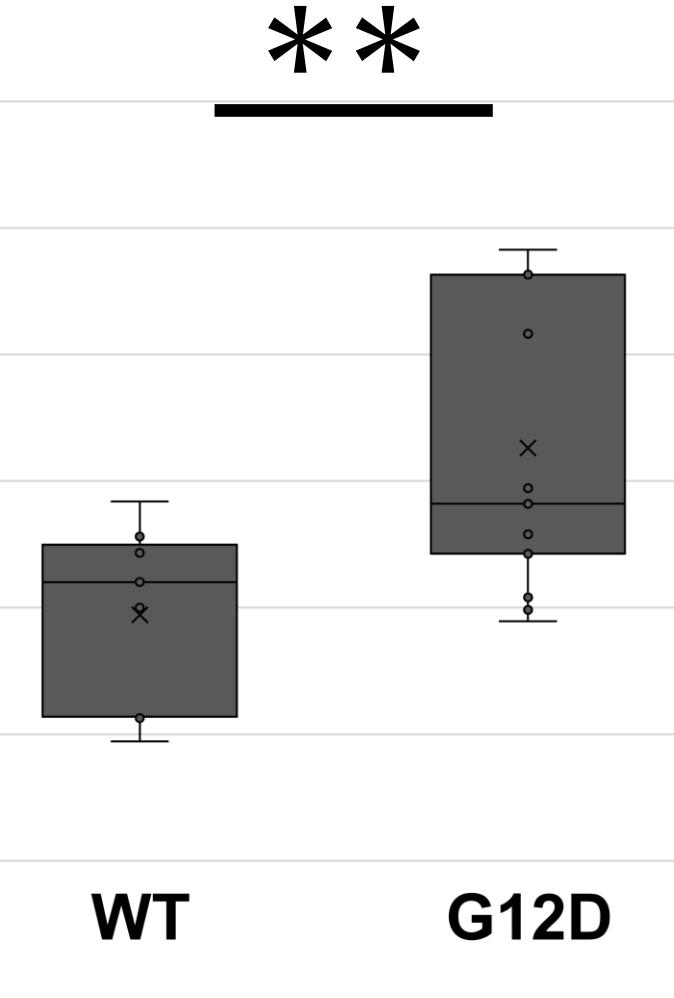
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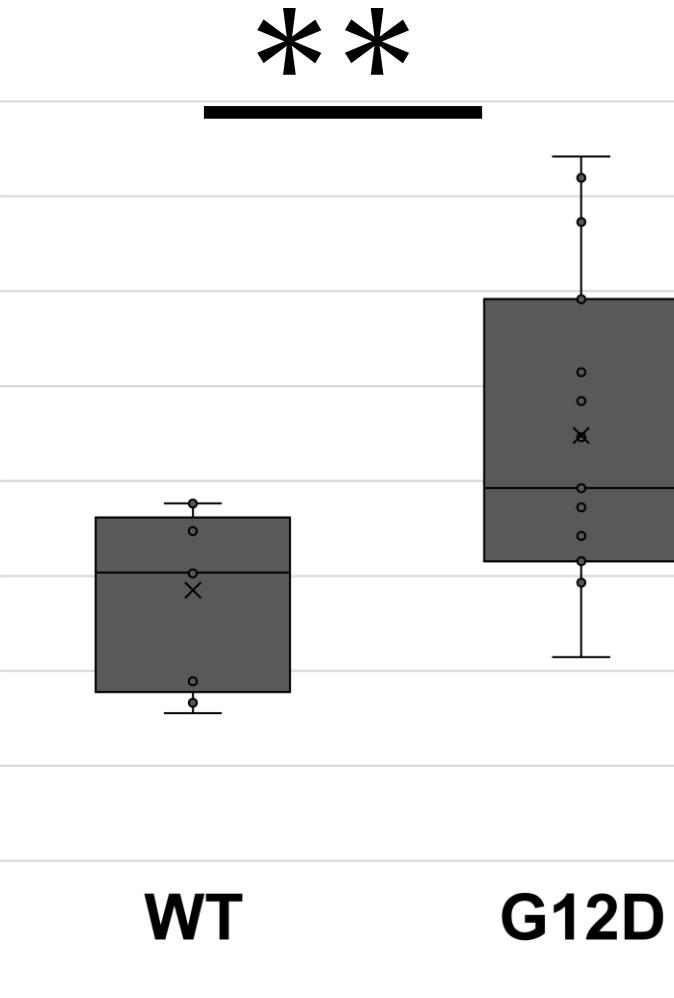
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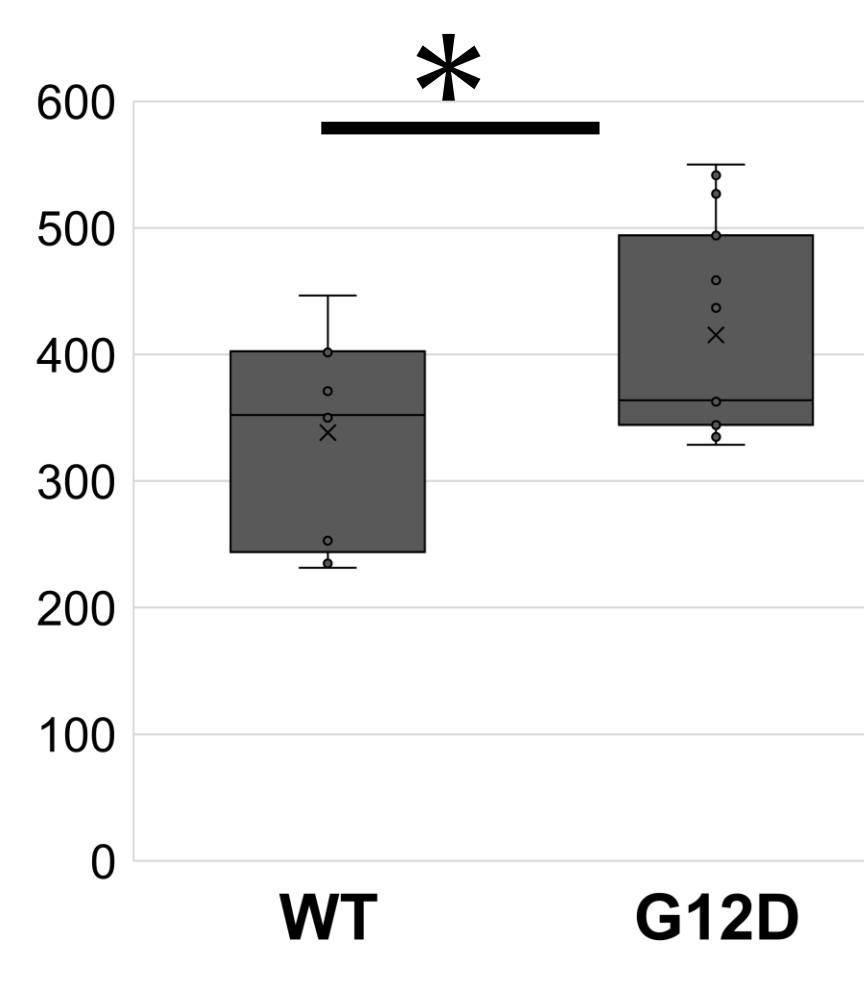
rAOL



AOL



rRSIIL



Supplementary Fig2

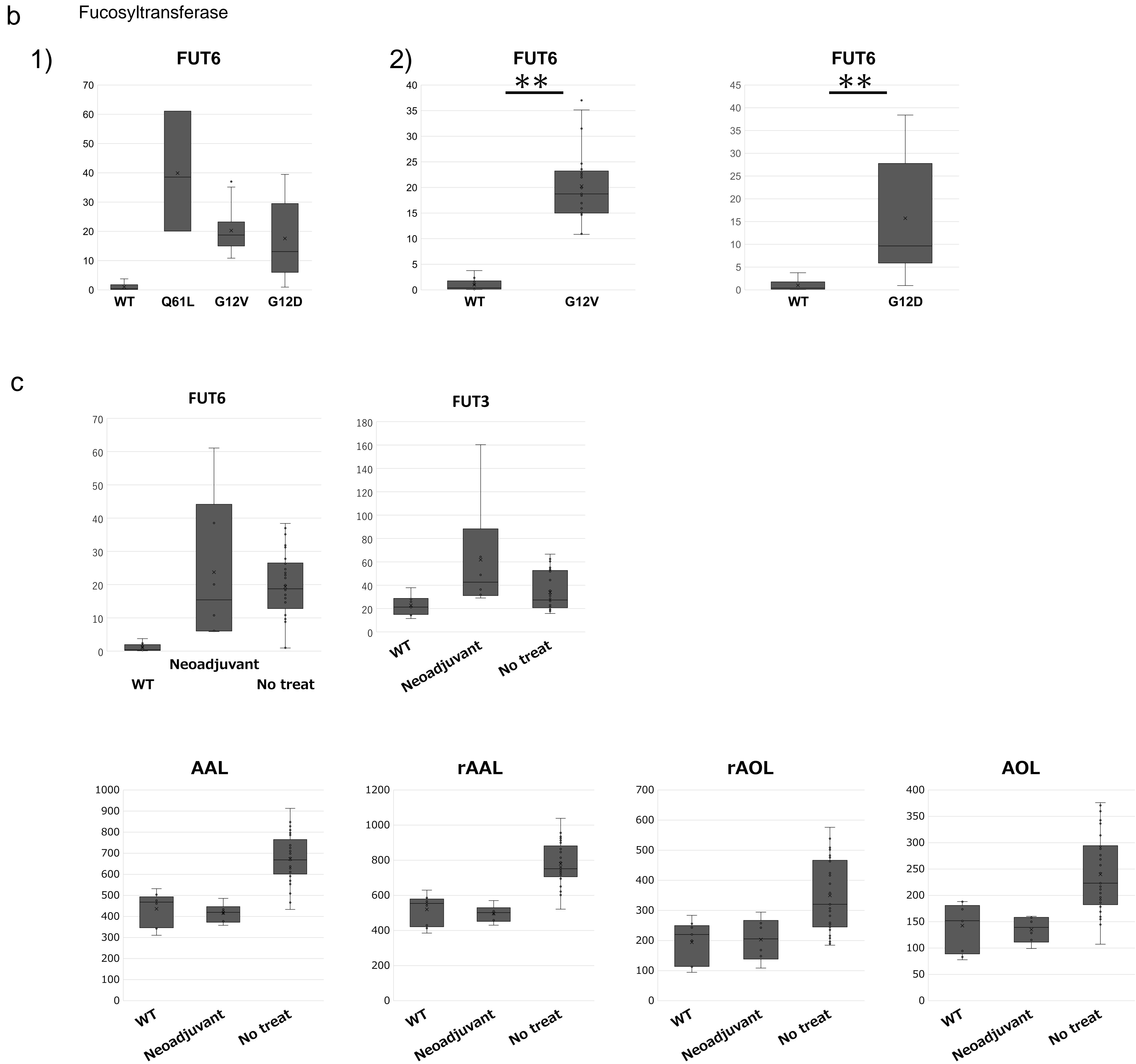


Fig S2: Analysis of lectin intensity and FUT6 expression by site of KRAS mutation

Data are shown as means \pm SD. Student's t test. ** p < 0.001. * p < 0.05.

- a) Reactivity of fucose-binding lectin signal intensities from lectin microarray for KRAS wild-type (WT), Q61L, G12V, and G12D(a-1). Comparison of the intensities with WT and G12V, WT and G12D, respectively (a-2).
- b) Expression of the FUT6 mRNA from RNA seq for KRAS wild-type (WT), Q61L, G12V, and G12D (b-1). Comparison of the expression with WT and G12V, WT and G12D, respectively (b-2).
- c) FUT6 mRNA expression from RNA seq and reactivity of fucose-binding lectin signal intensities from lectin microarray of organoids from KRAS wild-type (WT) and preoperative treated (Neoadjuvant) and untreated (No treat) patients.

Supplementary Fig3

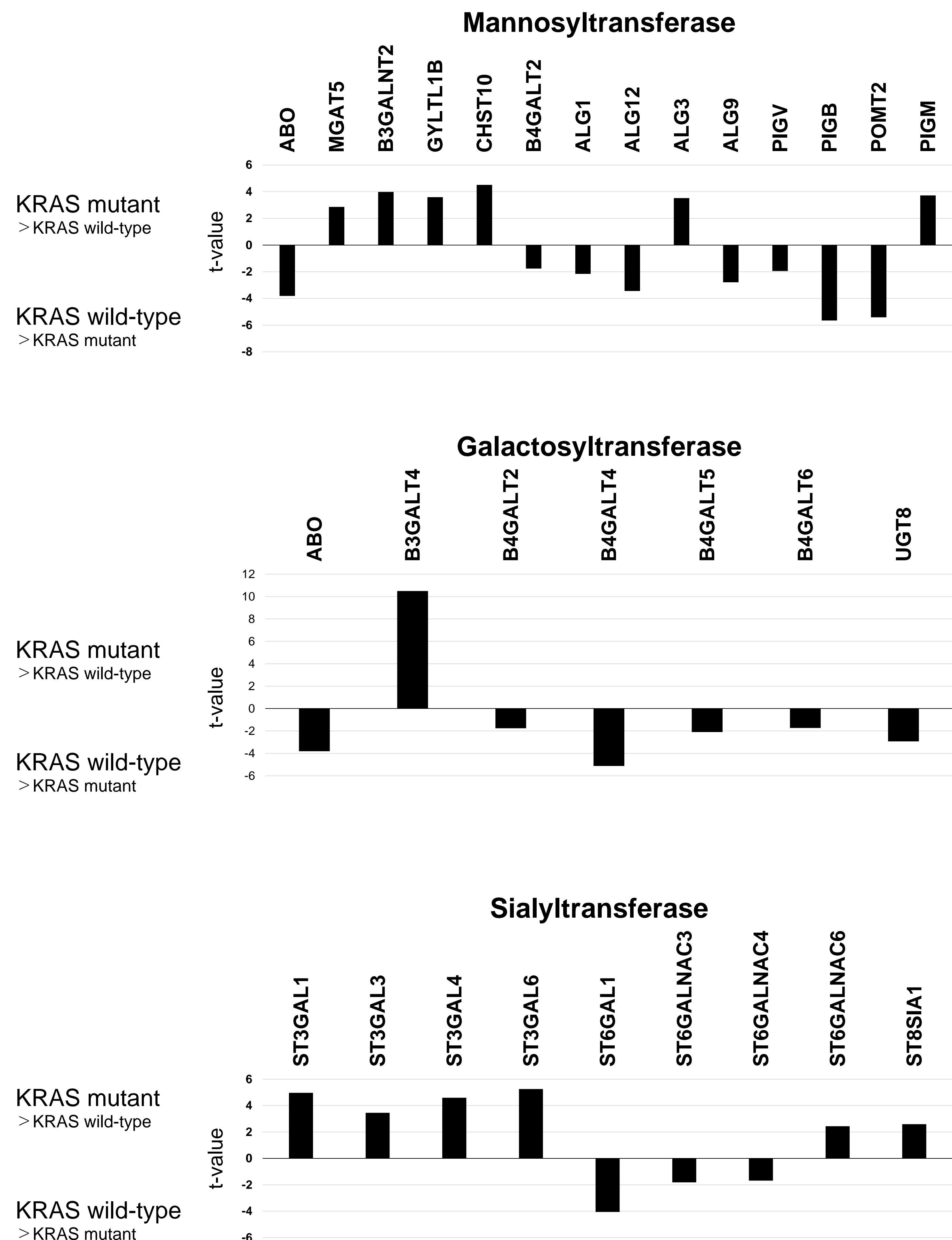


Figure S3: Comparison of glycosyltransferases (mannosyltransferase, galactosyltransferase, sialyltransferase) expression based on the result of RNA-seq between KRAS mutant and KRAS wild-type organoids