Reference	Experimental System	Sequence Source Cited	Haplotype (Provided or Inferred)	Cytotoxicity and Related Phenotypes
Anderson BR, et al. PLoS Genet. **11** 2015	Zebrafish	GenBank: BC112943 (G0)	Fig. 1. C-terminus only. Haplotypes cannot be inferred.	G2 (but not G1) promotes developmental kidney defects.
Beckerman P, et al. Nat. Med. **23** 2017	HEK293 Mouse podocyte Mouse kidney	APOL1-CDS-NM-003	Sup. Fig. 1. C-terminus only. Haplotypes cannot be inferred.	G1 and G2 expressing mice develop more proteinuria than G0 expressing mice.
Bruggeman LA, et al. J. Am. Soc. Nephrol. **27** 2016	Mouse Mouse podocyte	GenBank: NM003661 (Ref)	G2 deletion generated by 6bp deletion on G0 plasmid.	Transgenic G2 expression in podocytes leads to lower podocyte density and more severe preeclampsia phenotype than G0 expression.
Cheng D, et al. J. Lipid Res. **56** 2015	Mouse Rat hepatoma COS7	pIRES2-EGFP-APOL1 vector Genotype not provided	Not Available	All genotypes cytotoxic with overexpression in rat hepatoma cells (G1>G0=G2).
Fu Y, et al. J. Am. Soc. Nephrol. **28** 2017	Drosophila Nephrocyte	G0 cDNA - GenBank: AAI43040 (Ref) G1 cDNA - Patient podocytes	Likely Ref vs. G1 on natural background haplotype.	G1 expression causes increased lethality in Drosophila compared to G0. G1 expression causes larger nephrocyte size and lower nephrocyte number relative to G0.
Granado D, et al. J. Am. Soc. Nephrol. **28** 2017	Human podocyte HEK293	Human cDNA library derived from AB8 podocytes	Not Available	G1 and G2 stably expressed in HEK293 cells cause more toxicity than G0. G1 and G2 stably expressed in podocytes cause more toxicity than G0.
Hayek SS, et al. Nat. Med. **23** 2017	Podocyte Mouse kidney	GenBank: NM001136540 (Ref TV3) GenBank: NM003661 (Ref)	Not Available	In vivo gene delivery of G1 and G2 but not G0 cause proteinuria and foot process effacement in mice.
Kruzel-Davila E, et al. J. Am. Soc. Nephrol. **28** 2017	D. melanogaster Nephrocyte S. cerevisiae	GenBank: NM145343 (Ref TV2)	Fig. 1. C-terminus only. Haplotypes cannot be inferred.	G1 and G2 cause increased nephrocyte cell death and lethality in fly, and increased toxicity in yeast compared to G0.
Lan X, et al. Am. J. Phys. Renal Phys. **307** 2014	Human podocyte	Not Available	Not Available	G1 and G2 expressing podocytes cause increased podocyte swelling, LDH release, and necrosis compared to G0 expressing podocytes.
Lan X, et al. Exp. Mol. Pathol. **98** 2015	Human podocyte Co-cultured with human smooth muscle cells	Not Available	Not Available	More podocyte death when co-cultured with G1 or G2 expressing smooth muscle cells than with G0 expressing smooth muscle cells.
Lan X, et al. Exp. Mol. Pathol. **99** 2015	HEK293T	Not Available	Not Available	Overexpression of G1 and G2 more toxic than G0 in HEK239T cell.
Ma L, et al. J. Am. Soc. Nephrol. **28** 2017	HEK293	pIRES2-EGFP-APOL1 vector Genotype not provided	Not Available	G1/G2 expression causes mitochondrial dysfunction. G1/G2 moderately more toxic than G0.
Nichols B, et al. Kidney Int. **87** 2015	HEK293 HUVEC	GenBank: NM003661 (Ref)	G0: Ref (E150 M228 R255). G1 and G2: generated on natural haplotype backgrounds (E150 I228 K255). Data not provided in original paper.	More cytotoxicity with G1 and G2 vs G0 overexpression by transient transfection in HEK293 cells.
Okamoto K, et al. Commun. Biol. **1** 2018	HEK293 Human podocyte Human kidney bioposy	HEK/Mice - NM001136540 (Ref TV3) Mice - NM003661 (Ref)	Sup. Fig. 1 & 8. Small part of C-terminus. Haplotype cannot be inferred.	G1 and G2 cause increased cytotoxicity when stably overexpressed in HEK293 cells compared to G0. G1 BAC transgenic mice have more albuminuria than G0 BAC transgenic mice in a glomerular injury model.
Olabisi OA, et al. Proc. Natl. Acad. Sci. **113** 2016	HEK293	RefSeqORF: 1197 (Ref)	G0: G0 (K150 I228 K255). G1 and G2: generated on K150 background (K150 I228 K255). Data not provided in original paper.	G1 and G2 cause more cytotoxicity than G0 when expressed after stable transfection in HEK293 cells (Tet-induced).
Olabisi O, et al. Clin. Neph. **86** 2016	Zebrafish	Not Available	Not Available	Podocyte specific expression of RV leads to increased glomerular histological defects compared to G0 but no overt phenotypes observed.

O'Toole JF, et al. J. Am. Soc. Nephrol. **29** 2018	HEK293	GenBank: NM003661 (Ref)	Sup. Fig. 5. G0: Ref, G1 and G2 on Ref background (E150 M228 R255).	No differences in cytotoxicity when comparing G0 vs RV overexpression.
Thomson R, et al. Proc. Natl. Acad. Sci. **111** 2014	Mouse liver	GenBank: NM003661 (Ref)	Sup. Fig. 1 (Ref).	Hydrodynamic gene delivery of G1 and G2 but not G0 cause liver injury in mice.
Wen H, et al. Biosci. Rep. **38** 2018	Human podocyte	GenBank: NM145343 (Ref TV2)	Fig. 2. C-terminus only. Haplotypes cannot be inferred.	G1 and G2 cause increased ER stress, decreased nephrin expression, and more injury compared to G0 when overexpressed in podocytes.
Zhang J, et al. Proc. Natl. Acad. Sci. **115** 2018	HEK293	RefSeqORF: 1197 (Ref)	G0: G0 (K150 I228 K255). G1 and G2: generated on natural haplotype backgrounds (E150 I228 K255). Data not provided in original paper.	G1 and G2 stably expressed in HEK293 cells cause more toxicity than G0.

Table S3: APOL1 sequence and haplotype data from previously published papers. We surveyed the literature through 2018 for papers that directly compared G0 and Risk Variants (RV) for APOL1-induced cytotoxicity and related phenotypes. The starting DNA source cited by the authors is presented in column 3 ("Sequence Source Cited"); GenBank entries almost exclusively contain the Reference APOL1 sequence and may not accurately reflect the sequence used in experiments. Column 4 reports either sequence data provided by the authors or the APOL1 haplotypes inferred where possible from sequence data and mutagenesis steps described in the paper's methods. In general, APOL1 plasmids available from commercial sources encode the Reference sequence and RV engineered onto this background will generate non-toxic RV unless the amino acids at positions 228 and 255 are also engineered to match the RV background found in nature. Abbreviations: Transcript Variant (TV).