

## ABCA3-GFP EXPRESSION CONSTRUCTS

---

[Cole, F. Sessions, Wambach, Jennifer](#)

[Hardin, Clyde "Frank"](#)

T-017958

This technology includes a plasmid with the full length ATP-binding cassette transporter A3 (*ABCA3*) cDNA cloned into the pAcGFP1-N1 vector and another plasmid with the *ABCA3-GFP* cDNA inserted into the pShuttle vector. Mutations in *ABCA3* lead to severe neonatal respiratory distress syndrome and childhood interstitial lung disease. These plasmids were used in a study on the pathogenicity of two mutant *ABCA3* alleles (R288K and R1474W), which found that both mutations encode proteins with reduced ATPase activity but normal intracellular localization and protein processing.

**Publication:** [Functional Characterization of ATP-Binding Cassette Transporter A3 Mutations from Infants with Respiratory Distress Syndrome](#)