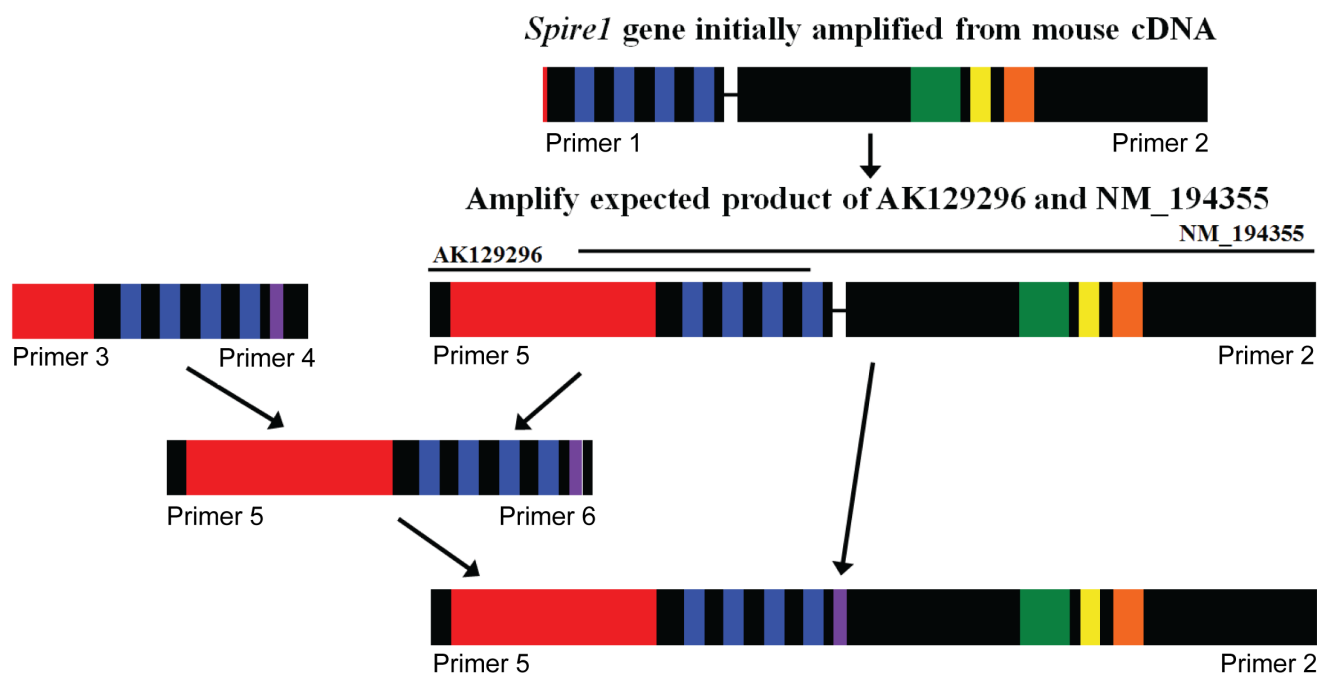









Figure 1-figure supplement 1

A



B

Mouse *spire1* containing all exons (802 a.a.)

| Domain | Residues | Function |
|--|----------|--|
|  KIND (alternate exon A) | 24-218 | Kinase-non catalytic C-lobe domain; putative signaling domain |
|  WH2 repeats | 255-373 | Wiskott-Aldrich syndrome protein (WASP) homology 2 domains; actin nucleation |
|  Alternate exon B | 384-397 | ? |
|  Alternate exon C | 535-592 | Mitochondrial targeting* |
|  Spir box | 602-622 | Potential Rab 3a interaction domain and membrane targeting |
|  mFYVE | 634-669 | Predicted membrane binding (PI ₃ P) |
|  Uncharacterized | | ? |

* Previously uncharacterized domain; novel function found in this study