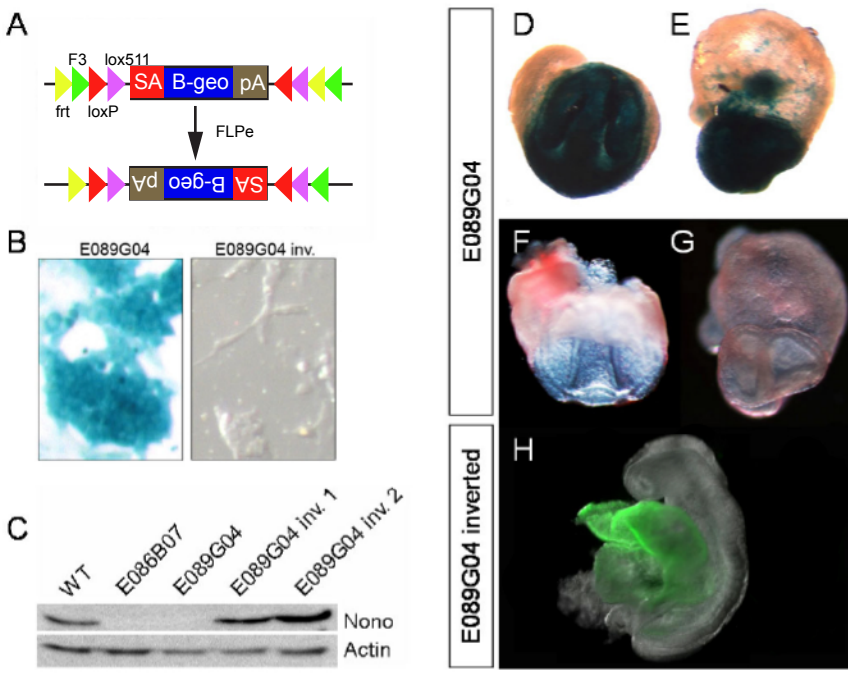
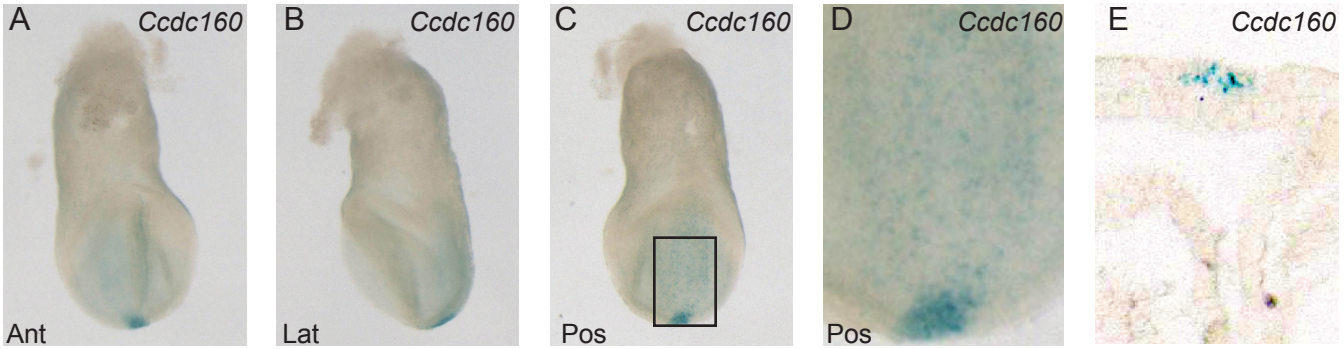
Cox_SIFig1


A
F3
lox511
SA
B-geo
pA
frt
loxP
FLPe
B
E089G04
E089G04 inv.
C
WT
E086B07
E089G04
E089G04 inv. 1
E089G04 inv. 2
Nono
Actin
D
E
E089G04
F
G
H
E089G04 inverted

Supplementary Figure 2



SI Fig. 1. Rescue of the *Nono* mutant phenotype. Clones E086B07 and E089G04 were trapped by an invertible GT cassette (A). The cassette contains multiple loxP and frt sites such that the GT is inverted when exposed to FLPe, rendering it ineffective. B) Inversion of the GT cassette leads to loss of ß-galactosidase activity in mESC line E089G04 after transient transfection with FLPe. C) Western Blot shows absence of Nono expression in clones E086B07 and E089G04. Inversion of the GT cassette leads to the silencing of the GT mutation and reoccurrence of Nono expression. D, E) E089G04 embryos at E8.75 with severe patterning defects and ubiquitous *LacZ* expression. F, G) Same embryos as D and E. Detection of tetraploid wild-type cells in the extraembryonic tissue by the fluorescent marker dsRed. H) Embryo from E089G04 inverted clones 1 at E9.5 with the mutant phenotype rescued by GT inversion. Detection of tetraploid wild-type host cells in the extraembryonic tissue by the fluorescent marker eGFP. Abbreviations: SA, splice acceptor; pA, poly adenylation signal, B-geo, β-galactosidease neomycin resistance gene fusion.

SI Fig. 2. Detail of expression of *Ccdc160* at E7.5. A) Anterior view of a late E7.5 *Ccdc160* mutant embryo, expression of *LacZ* can be seen in the region of the node. B) Lateral view of embryo in (A) with anterior to the left, showing node and weak staining in the posterior region of the embryo. C) Posterior view of embryo in (A) showing node staining and weak staining of *LacZ* in posterior region near streak. D) Detail of (C) showing that the posterior stain is single cells dispersed throughout the posterior streak region. E) Frontal histological section of embryo in (A) showing the expression of *LacZ* in the node, lying below the level of the definitive endoderm and above the ectoderm and migrating mesoderm. The image is oriented with the distal portion of the embryo to the top of the figure. Abbreviations Ant, anterior; Lat, lateral; Pos, posterior.