The NIPBL/NPM1 interplay regulates myeloid differentiation in zebrafish and humans through the canonical Wnt pathway and the dysregulation of these interactions may drive to leukemic transformations

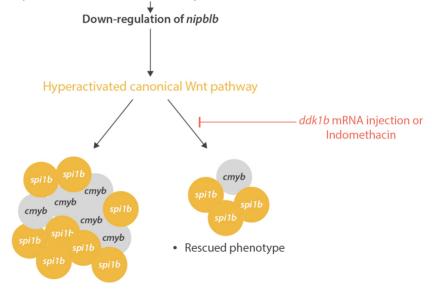


Adult acute myeloid leukemia (AML) patients with NUCLEOPHOSMIN1 (NPM1) mutation

Down-regulation of NIPBL



Zebrafish embryo model (Danio rerio) with overexpression of the mutated form of NPM1



- Impaired myeloid differentiation
- Increased number of myeloid precursors
- · Decreased number of myeoloid mature cells