



Figure 6. Summary of RNAi and Chromatin Proteins Required for RNAi-mediated DNA and Histone Methylation in *Arabidopsis*

Synthesis of dsRNA from repeated DNA elements provides a substrate for Dicer-mediated cleavage and siRNA generation (DCL3 and other Dicers). RNA-directed RNA polymerases (RdRP, RdR2) and RNA polymerase IV (RNA Pol IV) may be directly involved in the synthesis of dsRNA or its amplification. siRNAs then load onto Argonaute proteins (e.g., AGO4), which is likely to help target cognate repeat sequences for DNA and H3K9 methylation in association with other factors.