



**Figure S3** Demonstration of the efficiency of RNAi in *msh4Δ sgs1(RNAi)* meiosis.

(A) RNAi (induced by the addition of Cd<sup>2+</sup> to the medium - see Materials and methods) depletes Sgs1 not only in the cell carrying the RNAi hairpin (hp) construct but also partially in the wild-type partner after conjugation. For the purpose of demonstration by Western detection, a wild-type partner encoding HA-tagged Sgs1 is used.

(B) Western detection shows that Sgs1-HA expression is reduced to 17% and 20% as compared to the non-RNAi-induced control (corrected for the amount of protein loaded). Residual expression of Sgs1-HA is due to Sgs1-HA that was translated prior to conjugation and/or incomplete transmission of the RNAi to the partner cell.

(C) In the experiment shown in Figure 5, both partners carry the inducible RNAi construct (*msh4Δ sgs1(hp)*), and RNAi is expected to be complete. Additional evidence for RNAi efficiency is the complete anaphase I collapse that has been shown previously to be characteristic of *sgs1Δ* meiosis.