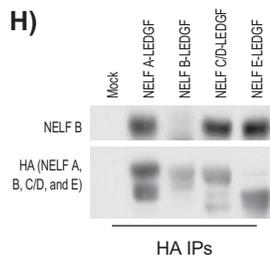
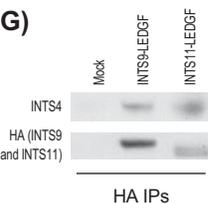
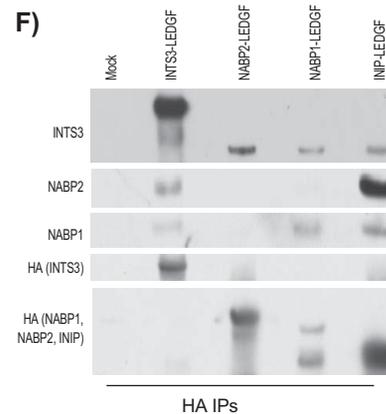
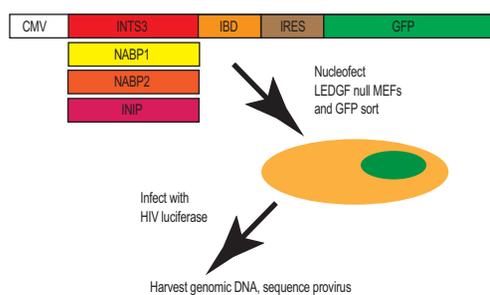
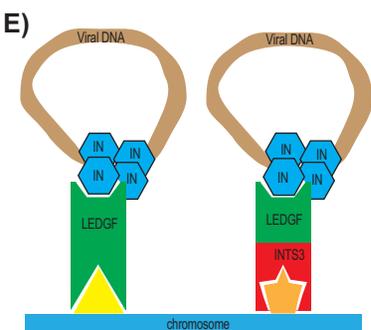
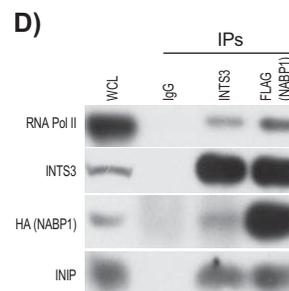
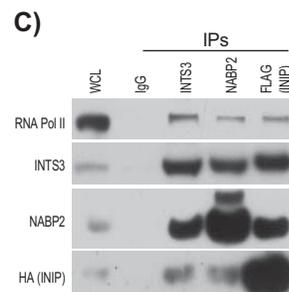


B)

Protein	NABP2	NABP1	INTS3	INIP
NABP2	0.1254	0.00244	0.0985	0.0701
NABP1	X	0.1232	0.0014	0.0281
INTS3	0.0822	0.1213	0.0768	0.1065
INIP	0.0736	0.2789	0.2618	0.2295
INTS6	0.0011	0.0023	0.0092	0.0168
INTS5	X	0.0007	0.0002	0.0025
INTS4	X	X	0.0001	0.0058
INTS1	X	X	0.0001	0.006
INTS12	X	X	0.0013	0.0054
INTS8	X	X	0.0005	0.0029
INTS7	X	X	0.0004	0.0026
INTS2	X	X	0.0002	0.0025
INTS9	X	X	X	0.0023
INTS10	X	X	X	0.0006
INTS11	X	X	X	0.0022
Pol II	0.0001	X	0.0007	0.0065



I)

LEDGF Fusion	Integrations
INTS3	98491
NABP1	214109
NABP2	90110
INIP	25077
INTS9	204160
INTS11	34387
NELFA	30781
NELFB	31659
NELFC/D	41897
NELFE	19159
NELF Composite	123495
SPT5	83704

Supplementary information, Figure S1 MudPIT and HIT-Seq analysis of INTS3/NABP complexes, Integrator, NELF, and DSIF.

- A) Lysates from T98G cells stably expressing FLAG-HA-tagged NABP1, NABP2, INTS3, or INIP were tandem affinity purified for analysis by MudPIT. Three percent of each purification was analyzed by SDS-PAGE and silver staining.
- B) Results from MudPIT analysis of (a). Numbers are reported as distributed Normalized Spectral Abundance Factors (dNSAF). Pol II numbers reflect only spectra detected for the Pol II catalytic subunit.
- C) T98G cells stably expressing FLAG-HA-INIP were immunoprecipitated and western blotted as indicated with antibodies to hypophosphorylated Pol II, INTS3, NABP2, and HA. WCL = whole cell lysate.
- D) T98G cells stably expressing FLAG-HA-NABP1 were immunoprecipitated and western blotted as indicated antibodies to hypophosphorylated Pol II, INTS3, HA, and INIP. WCL = whole cell lysate.
- E) Schematic illustrating the HIT-Seq protocol. LEDGF-null MEFs were nucleofected with constructs encoding LEDGF fusion proteins and an IRES-driven GFP. Transfected cells were sorted for GFP and infected with an HIV vector encoding luciferase. The genomic DNA of infected cells was harvested and analyzed by Illumina sequencing.
- F) INTS3, NABP1, NABP2, and INIP LEDGF fusions form proper complexes. HEK-293T cells were transfected with the indicated constructs. Lysates from these

cell were immunoprecipitated for the HA tag, and western blotting was performed as indicated.

G) INTS9 and INTS11 LEDGF fusions bind other Integrator subunits. HEK-293T cells were transfected with the indicated constructs. Lysates from these cell were immunoprecipitated for the HA tag, and western blotting was performed as indicated.

H) LEDGF fusion to NELF subunits does not affect formation of NELF. HEK-293T cells were transfected with the indicated constructs. Lysates from these cells were immunoprecipitated for the HA tag, and western blotting was performed as indicated.

I) Table of raw number of integrations recovered for each LEDGF fusion protein.