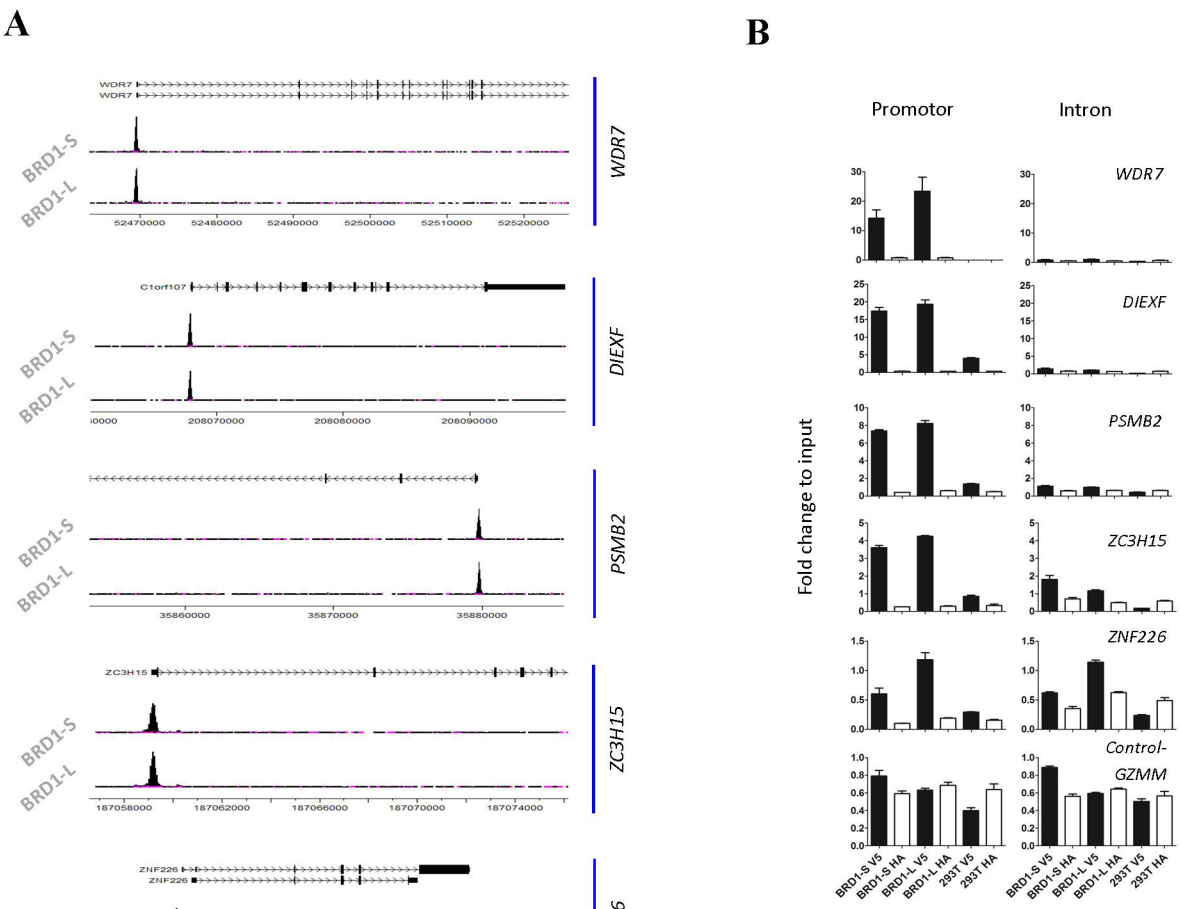
A
WDR7
BRD1-S
BRD1-L
52470000
52480000
52490000
52500000
52510000
52520000
WDR7
C1orf107
208070000
208080000
208090000
DIEXF
35860000
35870000
35880000
PSMB2
ZC3H15
187058000
187062000
187066000
187070000
187074000
ZC3H15
ZNF226
49360000
49364000
49368000
49372000
49376000
ZNF226
GZMM
495000
496000
497000
498000
499000
500000
501000
GZMM
B
Promotor
Intron
Fold change to input
WDR7
DIEXF
PSMB2
ZC3H15
ZNF226
Control-GZMM
BRD1-S V5
BRD1-S HA
BRD1-L V5
BRD1-L HA
293T V5
293T HA

Verification of five selected ChIP-seq promoter targets by ChIP-QPCR. From the 251 common promotor target genes (PTGs) of BRD1-S and BRD1-L, we selected 5 for validation with ChIP-QPCR. (A) The promoter loci at the WD repeat domain 7 (*WDR7*), digestive organ expansion factor homolog (*C1ORF107* or *DIEXF*), proteasome subunit β type, 2 (*PSMB2*), *ZC3H15*, and zinc finger protein 226 (*ZNF226*) showed BRD1-S and BRD1-L binding, while the promoter loci of the lymphocyte expressed gene granzyme M (*GZMM*) showed no significant binding of the BRD1 isoforms and was subsequently selected as a negative control. The BRD1-S or BRD1-L binding is shown in black whereas the control ChIP-seq (IP with anti-HA antibody) is shown in pink. (B) Primers were designed to amplify a 80-150bp sequence in the promoter region or the intron of all 6 genes (for primer sequences see Supplemental Table 2). ChIP was performed with either anti-V5 antibody (V5) conjugated beads or anti-HA (HA) conjugated beads using extracts from BRD1-S, BRD1-L or HEK293T cells (for further details see the materials and methods). ChIP-QPCR showed higher enrichment of BRD1-S and BRD1-L at the promoter loci of *WDR7*, *DIEXF*, *PSMB2*, *ZC3H15*, and *ZNF226* compared to controls. Also ChIP-QPCR showed less BRD1-S and BRD1-L binding at introns of *WDR7*, *DIEXF*, *PSMB2*, *ZC3H15*, and *ZNF226* while ChIP-QPCR showed lower and approximately equal BRD1-S and BRD1-L binding at the *GZMM* promoter and intron.